

Super Audio CD/ DVD RECEIVER

Operating instructions _____ **US**

Mode d'emploi _____ **FR**



AVD-S50ES

WARNING

For the customers in the U.S.A

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Owner's Record

The model and serial numbers are located at the rear of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. AVD-S50ES

Serial No. _____

CAUTION

Use of this appliance with some systems may present a shock or fire hazard. Do not use with any units which have the following marking located near output.

“WARNING! HAZARDOUS ENERGY!...”

CAUTION

As the laser beam used in this CD/DVD player is harmful to eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.



This label is located on the side exterior.

WARNING

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

For the customers in Canada

CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.



ENERGY STAR® is a U.S. registered mark. As an ENERGY STAR® partner, Sony Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

Precautions

Safety

- If anything falls into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- The unit is not disconnected from the mains as long as it is connected to the mains outlet, even if the unit itself has been turned off.
- Unplug the unit from the wall outlet if you do not intend to use it for an extended period of time. To disconnect the cord, pull it out by the plug, never by the cord.

Installing

- Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.
- Allow adequate air circulation to prevent internal heat buildup.
- Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation slots.
- Do not install the unit near heat sources such as radiators, or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration, or shock.
- Do not install the unit in an inclined position. It is designed to be operated in a horizontal position only.
- Keep the unit and discs away from equipment with strong magnets, such as microwave ovens, or large loudspeakers.
- Do not place heavy objects on the unit.
- If the unit is brought directly from a cold to a warm location, moisture may condense inside the receiver and cause damage to the lenses. When you first install the unit, or when you move it from a cold to a warm location, wait for about 30 minutes before operating the unit.

Thank you for purchasing this Sony Super Audio CD/DVD RECEIVER. Before operating this system, please read this manual thoroughly and retain it for future reference.

Precautions

On safety

- Caution – The use of optical instruments with this product will increase eye hazard.
- Should any solid object or liquid fall into the cabinet, unplug the receiver and have it checked by qualified personnel before operating it any further.

On placement

- Place the receiver in a location with adequate ventilation to prevent heat build-up in the receiver.
- At high volume, over long periods of time, the cabinet becomes hot to the touch. This is not a malfunction. However, touching the cabinet should be avoided. Do not place the unit in a confined space where ventilation is poor as this may cause overheating.
- Do not block the ventilation slots by putting anything on the receiver. The receiver is equipped with a high power amplifier. If the ventilation slots on the top surface are blocked, the unit can overheat and malfunction.
- Do not place the receiver on a soft surface such as a rug that might block the ventilation holes on the bottom.
- Do not place the receiver in a location near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.

On operation

- If the receiver is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the receiver. Should this occur, the receiver may not operate properly. In this case, remove the disc and leave the receiver turned on for about half an hour until the moisture evaporates.
- When you move the receiver, take out any discs. If you don't, the disc may be damaged.
- For power saving purposes, the receiver can be completely turned off by the POWER button on the main unit. Though the LED remains lit for a while, the receiver is completely off.

On adjusting volume

Do not turn up the volume while listening to a section with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level section is played.

On cleaning

Clean the cabinet, panel, and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzene.

If you have any questions or problems concerning your receiver, please consult your nearest Sony dealer.

On cleaning discs

Do not use a commercially available CD/DVD cleaning disc. It may cause a malfunction.

On your TV's color

If the speakers should cause the TV screen to have color irregularity, turn off the TV at once then turn it on after 15 to 30 minutes. If color irregularity should persist, place the speakers further away from the set.

IMPORTANT NOTICE

Caution: This receiver is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Projection televisions are especially susceptible to this.

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About this Manual

- The instructions in this manual describe the controls on the remote. You can also use the controls on the receiver if they have the same or similar names as those on the remote.
- The icons used in this manual are explained below:

Icon	Meaning	Icon	Meaning
	Functions available in DVD video mode		Functions available in Super Audio CD and Audio CD mode
	Functions available in VIDEO CD mode		Functions available for MP3* audio tracks
	Functions available in CD mode		More convenient features

* MP3 (MPEG1 Audio Layer 3) is a standard format defined by ISO/MPEG which compress audio data.

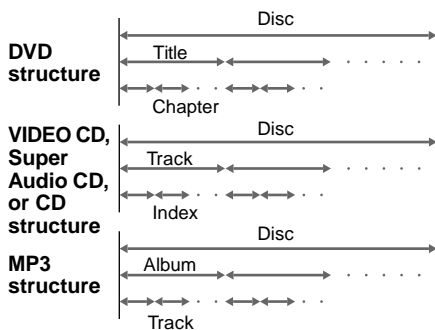
This receiver Can Play the Following Discs

Format of discs	
DVD VIDEO	
Super Audio CD	 SUPER AUDIO CD
VIDEO CD	
Music CD	

The “DVD VIDEO” logo is a trademark.

Terms for discs

- **Title**
The longest sections of a picture or music feature on a DVD, movie, etc., in video software, or the entire album in audio software.
- **Chapter**
Sections of a picture or a music piece that are smaller than titles. A title is composed of several chapters. Depending on the disc, no chapters may be recorded.
- **Album**
Section of a music piece on a data CD containing MP3 audio tracks.
- **Track**
Sections of a picture or a music piece on a VIDEO CD, Super Audio CD, CD, or MP3.
- **Index (Super Audio CD, CD) / Video Index (VIDEO CD)**
A number that divides a track into sections to easily locate the point you want on a VIDEO CD or Super Audio CD. Depending on the disc, no indexes may be recorded.
- **Scene**
On a VIDEO CD with PBC functions (page 34), the menu screens, moving pictures and still pictures are divided into sections called “scenes.”



Note on PBC (Playback Control) (VIDEO CDs)

This receiver conforms to Ver. 1.1 and Ver. 2.0 of VIDEO CD standards. You can enjoy two kinds of playback depending on the disc type.

Disc type	You can
VIDEO CDs without PBC functions (Ver. 1.1 discs)	Enjoy video playback (moving pictures) as well as music.
VIDEO CDs with PBC functions (Ver. 2.0 discs)	Play interactive software using menu screens displayed on the TV screen (PBC Playback), in addition to the video playback functions of Ver. 1.1 discs. Moreover, you can play high-resolution still pictures, if they are included on the disc.

Region code

Your receiver has a region code printed on the back of the unit and will only play DVDs labelled with the same region code.

DVDs labelled  will also play on this receiver.

If you try to play any other DVD, the message “Playback prohibited by area limitations.” will appear on the TV screen. Depending on the DVD, no region code indication may be labelled even though playing the DVD is prohibited by area restrictions.

Examples of discs that the receiver cannot play

The receiver cannot play the following discs:

- CD-ROMs (PHOTO CDs included)
- CD-Rs/CD-RWs other than those recorded in the following formats:
 - music CD format
 - video CD format
 - MP3 format that conforms to ISO9660* Level 1/Level 2, or its extended format, Joliet
- Data part of CD-Extras
- DVD-ROMs
- DVD Audio discs

* A logical format of files and folders on CD-ROMs, defined by ISO (International Standard Organization)

Do not load the following discs:

- A DVD with a different region code (page 8, 78).
- A disc that is neither standard nor circular (e.g., card, heart, or star shape).
- A disc with paper or stickers on it.
- A disc that has the adhesive, cellophane tape, or a sticker still left on it.

Note

Some CD-Rs or CD-RWs cannot be played on this receiver depending upon the recording quality or physical condition of the disc, or the characteristics of the recording device. Furthermore, the disc will not play if it has not been correctly finalized. For more information, see the operating instructions for the recording device.

Note on playback operations of DVDs and VIDEO CDs

Some playback operations of DVDs and VIDEO CDs may be intentionally set by software producers. Since this receiver plays DVDs and VIDEO CDs according to the disc contents the software producers designed, some playback features may not be available. Also, refer to the instructions supplied with the DVDs or VIDEO CDs.

Copyrights

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents, other intellectual property rights owned by Macrovision Corporation, and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

This receiver incorporates with Dolby* Digital and Dolby Pro Logic (II) adaptive matrix surround decoder and the DTS** Digital Surround System.

* Manufactured under license from Dolby Laboratories.
“Dolby”, “Pro Logic” and the double-D symbol are trademarks of Dolby Laboratories.

** Manufactured under license from Digital Theater Systems, Inc.
“DTS” and “DTS Digital Surround” are trademarks of Digital Theater Systems, Inc.

Notes about the Discs

On handling discs

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc.



- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After playing, store the disc in its case.

On cleaning

- Before playing, clean the disc with a cleaning cloth.
Wipe the disc from the center out.



- Do not use solvents such as benzine, thinner, commercially available cleaners, or anti-static spray intended for vinyl LPs.

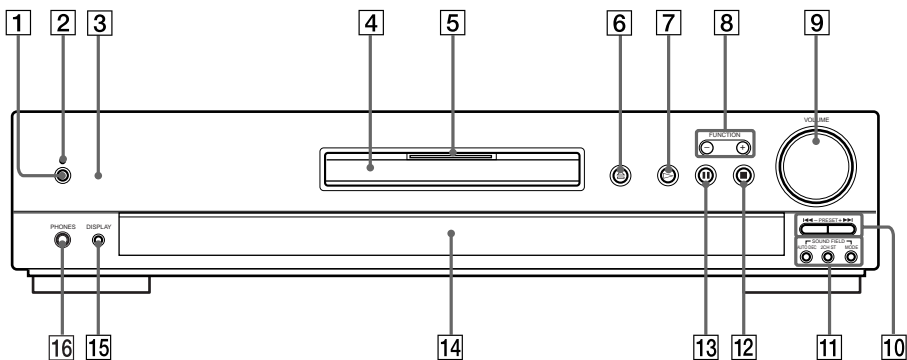
This system can only play back a standard circle disc. Using neither standard nor circular discs (e.g., card, heart, or star shape) may cause a malfunction.

Do not use a disc that has a commercially available accessory attached, such as a label or ring.

Index to Parts and Controls

For more information, refer to the pages indicated in parentheses.

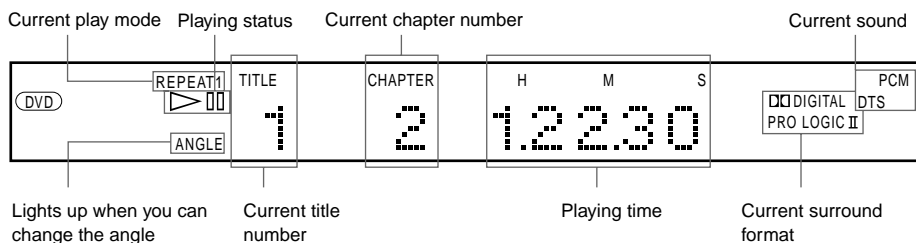
Front Panel



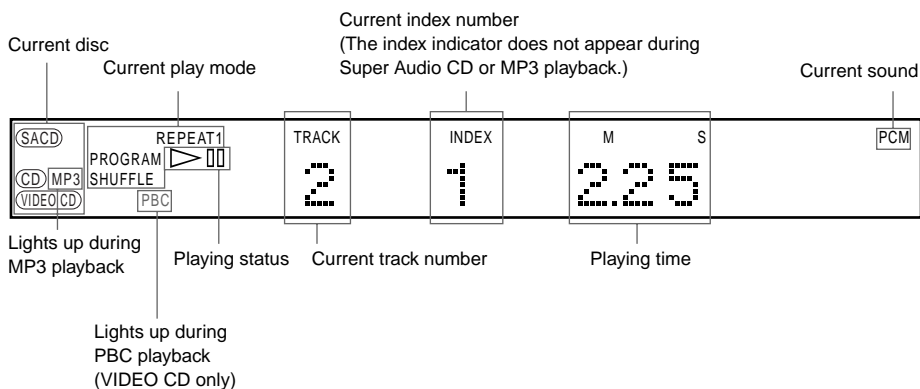
- | | |
|--|---|
| 1 POWER switch (31) | 9 VOLUME control (31, 71) |
| 2 STANDBY indicator (31) | 10 ◀◀/▶▶, PRESET +/- (32) |
| 3 (remote sensor) (17) | 11 SOUND FIELD AUTO DEC/2CH ST/
MODE (48, 49, 51) |
| 4 Disc tray (31) | 12 ■ (stop) (30, 31) |
| 5 MULTI CHANNEL DECODING
indicator | 13 (pause) (32) |
| 6 (open/close) (31) | 14 Front panel display (11) |
| 7 (play) (31) | 15 DISPLAY (62) |
| 8 FUNCTION +/- (61) | 16 PHONES jack (31) |

Front Panel Display

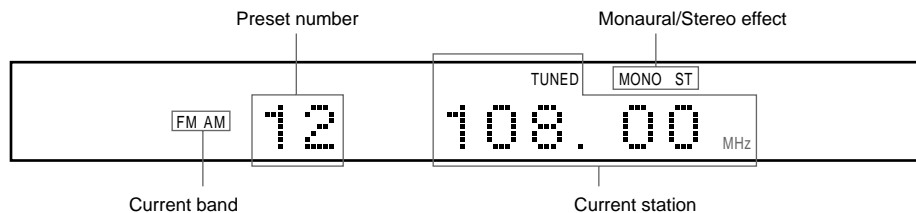
When playing back a DVD



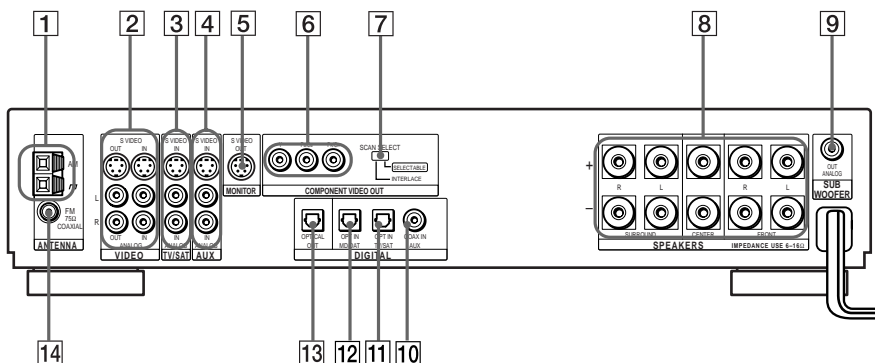
When playing back a Super Audio CD, CD, VIDEO CD, or MP3



When listening to the radio

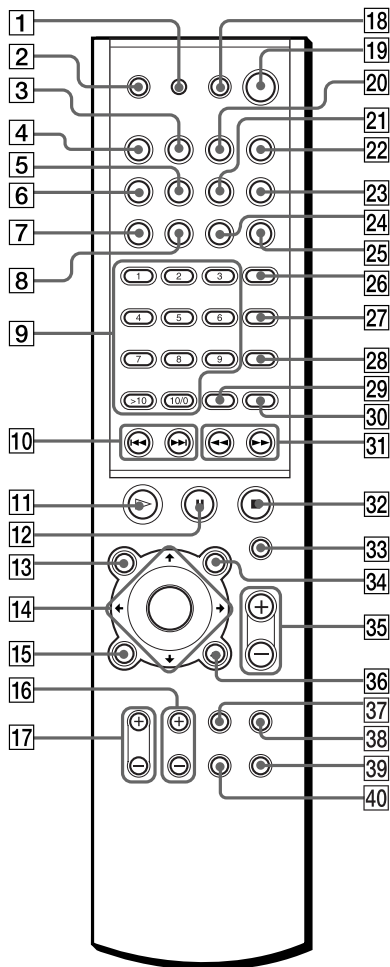


Rear Panel



- | | |
|---|---|
| 1 AM antenna (20) | 8 SPEAKERS jacks (18) |
| 2 VIDEO (S VIDEO/ANALOG L/R IN/OUT) jacks (22) | 9 SUB WOOFER (ANALOG OUT) jack (18) |
| 3 TV/SAT (S VIDEO/ANALOG L/R IN) jacks (22) | 10 DIGITAL (AUX COAX IN) jack |
| 4 AUX (S VIDEO/ANALOG L/R IN) jacks | 11 DIGITAL (TV/SAT OPT IN) jack (23) |
| 5 MONITOR (S VIDEO OUT) jack (22) | 12 DIGITAL (MD/DAT OPT IN) jack |
| 6 COMPONENT VIDEO OUT jacks (22) | 13 DIGITAL (OPTICAL OUT) jack |
| 7 COMPONENT VIDEO OUT switch (67, 72) | 14 FM 75Ω COAXIAL antenna jack (20) |

Remote



Note

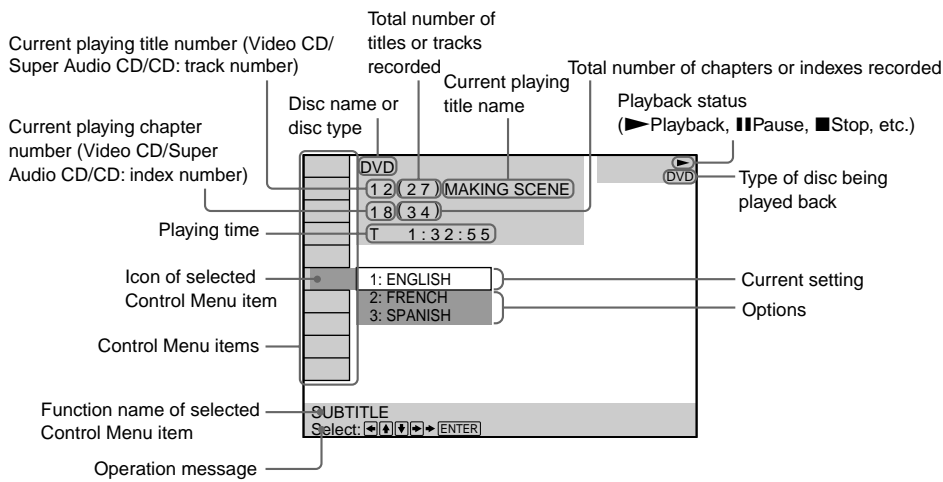
This remote control glows in the dark. However, before glowing, the remote must be exposed to light for awhile.

- 1 RM SET UP (59)
- 2 TV I/⏻ (on/standby) (59)
- 3 BAND (29)
- 4 FUNCTION (61)
- 5 NAME (63)
- 6 SAT (61)
- 7 PLAY MODE (36)
- 8 REPEAT (39)
- 9 Number buttons (33)
- 10 ◀◀/▶▶, CH +/- (29, 32)
- 11 ▷ (play) (31)
- 12 || (pause) (32)
- 13 TOP MENU/GUIDE (33)
- 14 ◀/▶/⏮/⏭/ENTER (25)
- 15 DVD DISPLAY (14, 38)
- 16 TV CH +/- (60)
- 17 TV VOL +/- (60)
- 18 AV I/⏻ (on/standby) (60)
- 19 I/⏻ (on/standby) (31)
- 20 STEREO/MONO (62)
- 21 MEMORY (29)
- 22 SOUND FIELD (48)
- 23 DISPLAY (62)
- 24 TIME (43)
- 25 DIMMER
- 26 AUDIO (46)
- 27 ANGLE (52)
- 28 SUBTITLE (53)
- 29 ENTER (61)
- 30 CLEAR (37)
- 31 ◀◀/▶▶ (29, 40)
- 32 ■ (stop) (31)
- 33 MUTING (32)
- 34 AV MENU (33)
- 35 VOLUME +/- (31, 71)
- 36 ↶ RETURN/EXIT (34)
- 37 TV/VIDEO (60)
- 38 AMP MENU (25)
- 39 DVD SETUP (64)
- 40 WIDE (60)








Guide to the Control Menu Display







Use the Control Menu to select a function that you'd like to use. The Control Menu display appears when the DVD DISPLAY button is pressed. For details, refer to the page in parentheses.


Control Menu

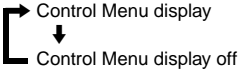


List of Control Menu Items



 DISC	Displays the disc name or the disc type inserted into the receiver.
 TITLE (DVD only) (page 41)/ SCENE (only VIDEO CD in PBC playback)/TRACK (VIDEO CD only) (page 41)	Selects the title (DVD), the scene (VIDEO CD in PBC playback), or the track (VIDEO CD) to be played.
 CHAPTER (DVD only) (page 42)/INDEX (VIDEO CD only) (page 42)	Selects the chapter (DVD) or the index (VIDEO CD) to be played.
 ALBUM (MP3 only) (page 35, 41)	Selects the album (MP3) to be played.
 TRACK (Super Audio CD/ CD/MP3 only) (page 35, 41)	Selects the track (Super Audio CD/CD/ MP3) to be played.
 INDEX (Super Audio CD/CD only) (page 42)	Displays the index and selects the index (Super Audio CD) to be played.
 TIME (page 42)	Checks the elapsed time and the remaining playback time. Inputs the time code for picture and music searching.

 AUDIO (DVD/VIDEO CD/ Super Audio CD/CD only) (page 46)	Changes the audio setting.
 SUBTITLE (DVD only) (page 53)	Displays the subtitles. Changes the subtitle language.
 ANGLE (DVD only) (page 52)	Changes the angle.
 PLAYMODE (page 38)	Selects the play mode.
 REPEAT (page 39)	Plays the entire disc (all titles/all tracks), one title/chapter/track/album, or contents of program repeatedly.
 CUSTOM PARENTAL CONTROL (page 54)	Sets the disc to prohibit playing.

 Each time you press DVD DISPLAY, the Control Menu display changes as follows:



The Control Menu items are different depending on the disc.

 The Control Menu icon indicator lights up in green  →  unless you set the REPEAT setting to “OFF.”

The “ANGLE” indicator lights up in green only when the angles can be changed.

Quick Overview


This chapter presents a quick overview so you can begin enjoying your new receiver right away. For selecting a language used in the on-screen display, refer to the page 65. For selecting the aspect ratio of the TV to be connected, refer to the page 66.

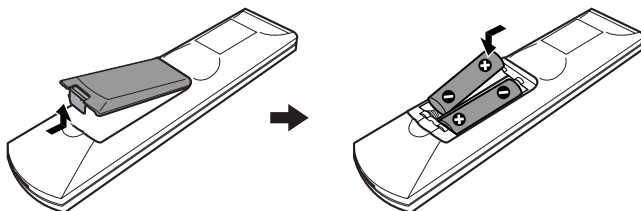
Unpacking

Check that you have the following items:

- AM loop antenna (1)
- FM wire antenna (1)
- S Video cord (1)
- Remote Commander (remote) RM-SP50 (1)
- R6 (size AA) batteries (2)

Inserting Batteries into the Remote

You can control the receiver using the supplied remote. Insert two R6 (size AA) batteries by matching the \oplus and \ominus ends on the batteries to the markings inside the compartment. When using the remote, point it at the remote sensor  on the receiver.



Notes

- Do not leave the remote in an extremely hot or humid place.
- Do not use a new battery with an old one.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not expose the remote sensor to direct light from the sun or lighting apparatus. Doing so may cause a malfunction.
- If you do not use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Step 1: Speaker System Hookup

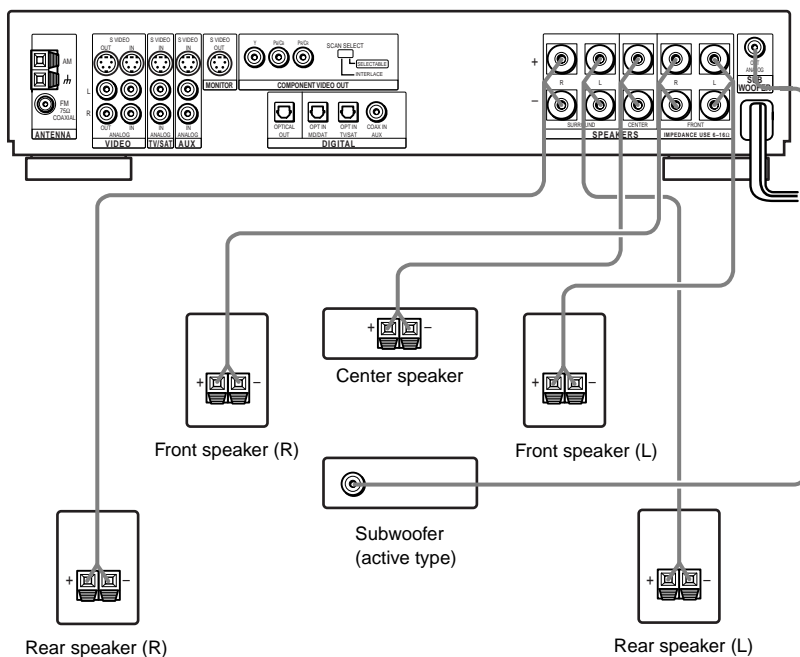
You can enjoy surround sound by connecting 5 speakers (front L/R speakers, center speaker, rear L/R speakers) and active subwoofer to the receiver. If you do not connect 5 speakers and active subwoofer to the receiver, the receiver offers the means to optimize signal depending on the number of connected speakers. When you connect 2 speakers to the receiver, connect the speakers to the SPEAKERS FRONT L/R jacks.

Notes

- Be sure to match the speaker cord to the appropriate terminal: \oplus to \oplus , \ominus to \ominus , L to L, and R to R jack.
- Use the high performance speakers.
- Use the same size and performance speakers for the front, center, and rear speakers.
- To obtain the best possible surround sound, specify the speaker parameters (number, distance, level, etc.) on page 25.

Terminals for connecting the speakers

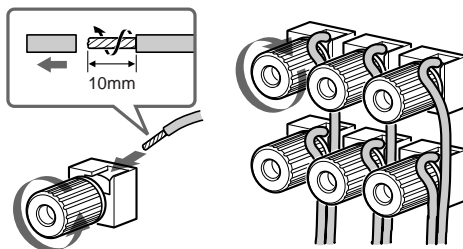
Connect the	To the
Front speakers	SPEAKERS FRONT L and R terminals
Rear speakers	SPEAKERS SURROUND L and R terminals
Center speaker	SPEAKERS CENTER terminal
Subwoofer	SUBWOOFER ANALOG OUT terminal



Note for connecting the speaker cords to the receiver

Remove about 10 mm of insulation at the end of the cord, then twist the exposed wires. Connect the stripped ends of the cords to the terminals, taking care to avoid mutual contact between the cords.

Make sure the cords are firmly connected to the speaker and receiver terminals.

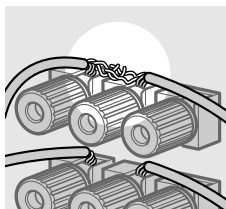


To avoid short-circuiting the speakers

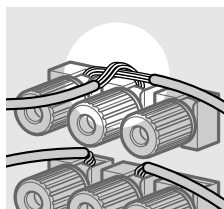
Short-circuiting of the speakers may damage the receiver. To prevent this, be sure to follow these precautions when connecting the speakers. Make sure the bare wire of each speaker cord does not touch another speaker terminal or the bare wire of another speaker cord.

Examples of poor conditions of the speaker cord

Stripped speaker cord is touching another speaker terminal.



Stripped cords are touching each other due to excessive removal of insulation.



After connecting all the components, speakers, and AC power cord (mains lead), output a test tone to check that all the speakers are connected correctly. For details on outputting a test tone, see page 27.

If no sound is heard from a speaker while outputting a test tone, or a test tone is output from a speaker other than the one currently displayed on the front panel display, the speaker may be short-circuited. If this happens, check the speaker connection again.

Notes

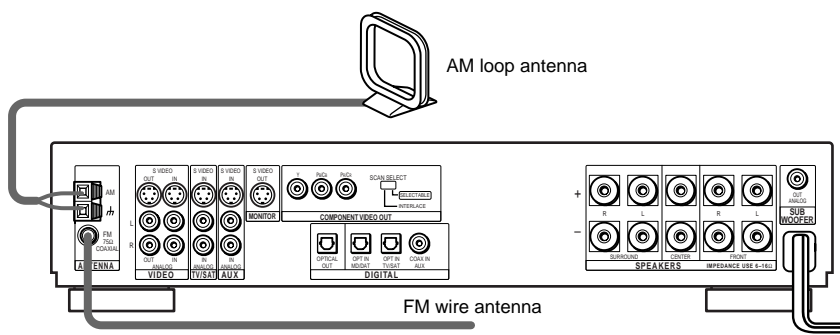
- Be sure to match the speaker cord to the appropriate terminal on the components: \oplus to \oplus , and \ominus to \ominus . If the cords are reversed, the sound will be distorted and will lack bass.
- If you use front speakers with low maximum input rating, adjust the volume carefully to avoid excessive output on the speakers.
- When connecting the stripped ends of the speaker cords, make sure the ends do not touch each other or neighbouring terminals.

Step 2: Antenna Hookups

Connect the supplied AM/FM antennas for listening to the radio.

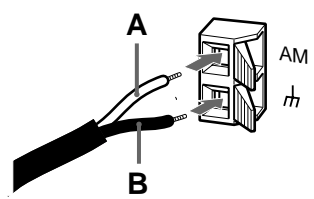
Terminals for connecting the antennas

Connect the	To the
AM loop antenna	AM terminals
FM wire antenna	FM 75Ω COAXIAL terminal



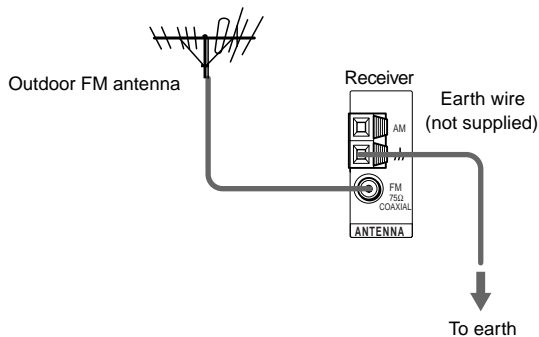
Notes

- To prevent noise pickup, keep the AM loop antenna away from the receiver and other components.
- Be sure to fully extend the FM wire antenna.
- After connecting the FM wire antenna, keep it as horizontal as possible.
- When you connect the supplied AM loop antenna, connect the black cord (B) to the \hbar terminal, and the white cord (A) to the other terminal.



💡 If you have poor FM reception

Use a 75-ohms coaxial cable (not supplied) to connect the receiver to an outdoor FM antenna as shown below.

**Note**

If you connect the receiver to an outdoor antenna, ground it to protect against lightning. To prevent a gas explosion, do not connect the earth wire to a gas pipe.

Step 3: TV and Video Component Hookups

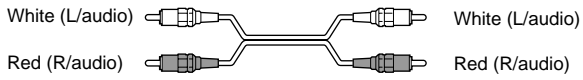
Required cords

S Video cord for connecting a TV monitor




Audio cords (not supplied)

When connecting a cord, be sure to match the color-coded pins to the appropriate jacks on the components.



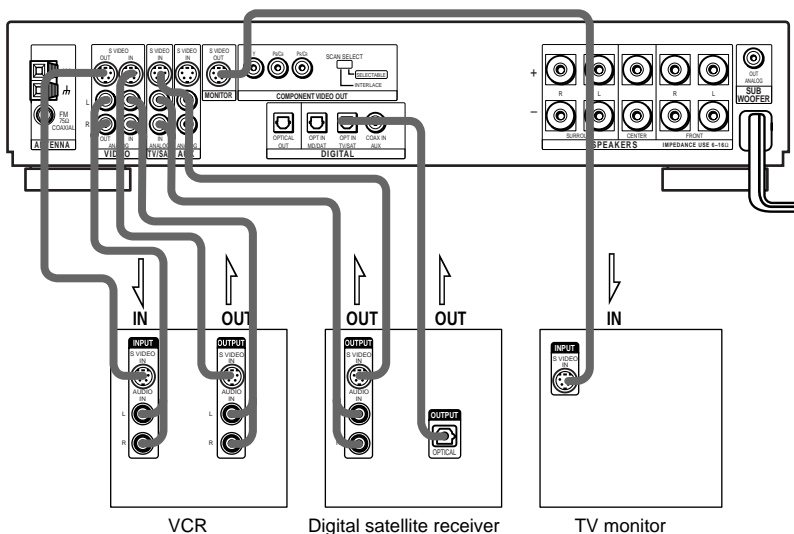
Jacks for connecting video components

Connect a	To the
TV monitor	MONITOR (S VIDEO OUT) jack
VCR	VIDEO (S VIDEO/ANALOG L/R IN/OUT) jacks
Digital satellite receiver	TV/SAT (S VIDEO/ANALOG L/R IN) jacks

 **When using the COMPONENT VIDEO OUT jacks (Y, P_B/C_B, P_R/C_R) instead of the S Video jacks**
Your TV monitor must also be connected via COMPONENT VIDEO OUT jacks (Y, P_B/C_B, P_R/C_R). If your TV accept progressive format signals, you must use this connection and set “COMPONENT OUT” to “PROGRESSIVE” in “SCREEN SETUP” (page 67).

Notes

- When you select VIDEO using the FUNCTION button, the signal is output from the front L/R speakers, but not from the VIDEO (S VIDEO/ANALOG L/R OUT) jacks.
- When you use the Video line outputs, please set the unit to 2CH STEREO mode. If the unit is not in 2CH STEREO mode, the line outputs may not function properly.
- When the mode of the receiver is not set to “DVD,” no signal is output from the COMPONENT VIDEO OUT jacks.
- When the mode of the receiver is set to DVD and “INTERACE” is selected in “SCREEN SETUP,” the signal is output from the MONITOR or COMPONENT VIDEO OUT jacks.
- When the mode of the receiver is set to “DVD” and “PROGRESSIVE” is selected in “SCREEN SETUP,” the signal is output only from the COMPONENT VIDEO OUT jacks.



If you connect a digital satellite receiver with the OPTICAL OUT jack

The digital satellite receiver can be connected to the DIGITAL (TV/SAT OPT IN) jack instead of the ANALOG IN L/R jacks of the receiver.

The receiver can accept both the digital and analog signals. Digital signals have priority over analog signals. If the digital signal ceases, the analog signal will be processed after 2 seconds.

If you connect a digital satellite receiver without the OPTICAL OUT jack

Connect the digital satellite receiver to the S VIDEO IN and ANALOG IN L/R jacks only of the receiver.

Connecting the AC Power Cord (mains lead)

Before connecting the AC power cord (mains lead) of this receiver to a wall outlet (mains), connect the speakers to the receiver (see page 17).

Connect the AC power cord (mains lead) of your TV/video components to a wall outlet (mains).

Speaker Setup

For the best possible surround sound, all the speakers other than the subwoofer should be the same distance from the listening position (A).

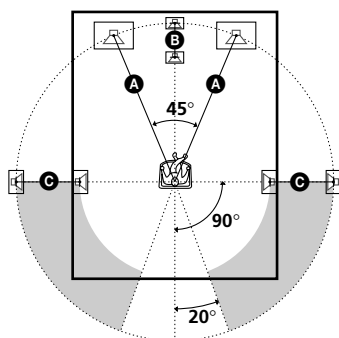
However, this receiver allows you to place the center speaker up to 1.6 meters (5.0 feet) closer (B) and the rear speakers up to 4.6 meters (15.0 feet) closer (C) to the listening position.

The front speakers can be placed from 1.0 to 15.0 meters (3.0 to 50.0 feet) (A) from the listening position.

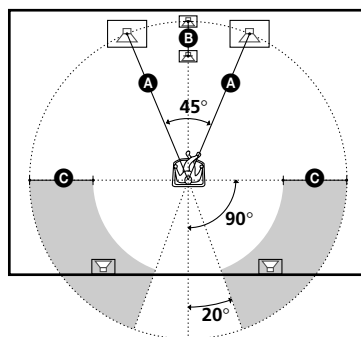
You can place the subwoofer in any position.

You can place the rear speakers either behind you or to the side, depending on the shape of your room, etc.

When the rear speakers are placed to the side



When the rear speakers are placed behind you



Note

Do not place the center and rear speakers farther away from the listening position than the front speakers.

When color irregularity occurs on the TV screen

If speakers are installed too close, color irregularity may occur on the screen.

If color irregularity occurs...

Turn off the TV set once, then turn it on after 15 to 30 minutes.

If color irregularity occurs again...

Place speakers farther away from the TV set.

If color irregularity still occurs after performing the above...

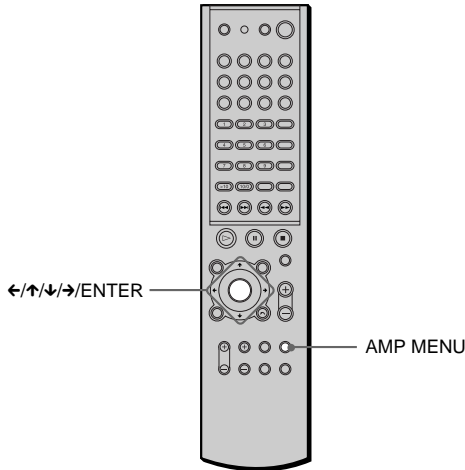
Make sure that no magnetic object is nearby speakers. Color irregularity may occur as a result of interaction between speakers and the magnetic object.

Examples of possible sources of magnetic interference include: magnetic latches on a TV stand, healthcare devices, toys, etc.

Specifying the speaker parameters

To obtain the best possible surround sound, first specify the distance of the speakers from your listening position, then set the balance and level. Use the test tone to adjust the speaker volumes to the same level.

You may adjust the speaker parameters using **SPEAKER SETUP** in the setup display (page 69).



To specify the size, distance, position and height of the speakers

- 1** Press **AMP MENU** repeatedly to display **♪ SP. SETUP** on the front panel display.
- 2** Sit in your listening position and select the item to be set using **↑/↓**.
 - Items set in **♪ SP. SETUP**
 - Size of 5 speakers (front L/R, center, rear L/R)
 - with or without the center and rear L/R speakers and subwoofer
 - Distance of the front, rear, and center speakers
 - Position and height of the rear speakers
- 3** Set the parameter using **←/→**.
The selected parameter will appear on the front panel display.
- 4** Repeat Steps 2 and 3 to set other parameters in **♪ SP. SETUP**.
If you do not operate the remote for a few seconds, the parameter disappears from the display and is stored in the receiver.

■SIZE

When you do not connect center or rear speakers or subwoofer, set the parameters for **F.SP.**, **C.SP.**, **R.SP.**, and **S.W.** The default settings are underlined.

- **F.SP.** (front speaker)
 - LARGE: Normally select this.
 - **SMALL**: Select this if the small speakers are used for the front speaker.
- **C.SP.** (center speaker)
 - LARGE: Normally select this.
 - **SMALL**: Select this if the small speaker is used for the center speaker.
 - **NO**: Select this if no center speaker is used.

- R.SP. (rear speakers)
 - LARGE: Normally select this. Specify the position and height to implement the Digital Cinema Surround modes in the sound field (page 49) properly.
 - SMALL: Select this if the small speakers are used for the rear speaker. Specify the position and height to implement the Digital Cinema Surround modes in the sound field (page 49) properly.
 - NO: Select this if no rear speakers are used.
- S.W. (subwoofer)
 - YES: Select this if the subwoofer is used.
 - NO: Select this if no subwoofer is used.

DISTANCE

You can vary the distance of each speaker as follows. The default settings are underlined.

- F. D. 5 m (17 ft) (front speakers distance)
Front speaker distance can be set in 0.2 meters (1.0 foot) steps from 1.0 to 15.0 meters (3.0 to 50.0 feet).
- C. D. 5 m (17 ft) (center speaker distance)
Center speaker distance can be set in 0.2 meters (1.0 foot) steps from a distance equal to the front speaker distance to a distance 1.6 meters (5.0 feet) closer to your listening position.
- R. D. 3.4 m (12 ft) (rear speakers distance)
Rear speaker distance can be set in 0.2 meters (1.0 foot) steps from a distance equal to the front speaker distance to a distance 4.6 meters (15.0 feet) closer to your listening position.

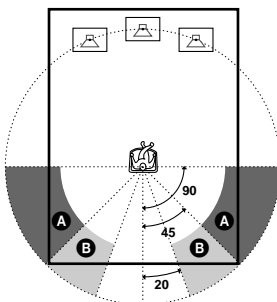
Note

If each of the front or rear speakers are not placed an equal distance from your listening position, set the distance of the closest speaker.

Specifying the rear speaker position and height

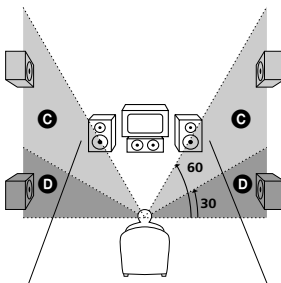
If you select anything other than “NO” in “R.SP.,” specify the position and height of the rear speakers. The default settings are underlined.

Position diagram



- R. P. BEHIND
Select this if the rear speakers are located in the section **B**.
- R. P. SIDE
Select this if the rear speakers are located in the section **A**.

Height diagram



- R. H. LOW

Select this if the rear speakers are located in section **D**.

- R. H. HIGH

Select this if the rear speakers are located in section **C**.

These parameters are not available when “R.SP.” is set to “NO”.

To specify the balance and level of the speakers

- 1 Press AMP MENU repeatedly to display **♪ LEVEL** on the front panel display.
- 2 Use **↑/↓** to select T.TONE and use **←/→** to set T.TONE to ON.
You will hear the test tone from each speaker in sequence.
- 3 Sit in your listening position and select the item to be adjusted using **↑/↓**.
 - Items adjusted in **♪ LEVEL**
 - Balance of the front and rear speakers
 - Volume level of the center and rear speakers and subwoofer
- 4 Adjust the volume level so that the volume of the test tone from each speaker sounds the same using **←/→**.
The adjusted value will appear on the front panel display.
- 5 Repeat Steps 3 and 4 to adjust other parameters in **♪ LEVEL**.
If you do not operate the remote for a few seconds, the value disappears from the display and is stored in the receiver.
- 6 Use **↑/↓** to select T.TONE and use **←/→** to set T.TONE to OFF.

■BALANCE

You can vary the balance of each speaker as follows. The default settings are underlined.

- F. I center (front speakers)
Adjust the balance between the front left and right speakers (You can adjust from center, 6 steps left or right).
- R. I center (rear speakers)
Adjust the balance between the rear left and right speakers (You can adjust from center, 6 steps left or right).

■LEVEL

You can vary the level of each speaker as follows. The default settings are underlined.

- C. LEVEL (0 dB) (center speaker level)
Adjust the level of the center speaker (You can adjust from -10 dB to +10 dB in 1 dB steps.).
- R. LEVEL (0 dB) (rear speakers level)
Adjust the level of the rear speakers (You can adjust from -10 dB to +10 dB in 1 dB steps.).
- S.W. LEV (0 dB) (subwoofer level)
Adjust the level of the subwoofer (You can adjust from -10 dB to +10 dB in 1 dB steps.).

■Notes

- When you select an item, the sound cuts off for a moment.
- Depending on the settings of other speakers, the subwoofer may output excessive sound.

To adjust the volume of all the speakers at one time

Use the VOLUME control.

Other AMP MENU settings

You can control the brightness of the front panel display, clear the preset stations and the station names, and set the speaker parameters back to the default setting. Press AMP MENU repeatedly to display **♪CUSTOMIZE**. Use **↑/↓** to select the following items.

■DIMMER

You can change the brightness of the front panel display by two steps.

■MEMO. CLR.

- N (No): Skip back to previous menu.
- Y (Yes): If you select Y by pressing ENTER, “Really? N” and “Really? Y” appears.
If you select “Really? Y,” by pressing ENTER, “ALL CLEAR!” is displayed and all settings such as preset stations and station names will be cleared, and speaker parameters will be reset to their default settings.

This receiver incorporates with Dolby Pro Logic II which has movie mode and music mode, and the receiver can reproduce the 2 channel sound in 5.1 channel through Dolby Pro Logic II. When the Sound Field is set to “AUTO DECODING*” or “NORMAL SURROUND,” you can select the type of decoding for 2 channel source. Press AMP MENU repeatedly to display **♪2CH MODE**. Use **↑/↓** to select the following items.

* The selected decoding mode is applied only when the Dolby Digital [Lt/Rt] signal is input.

■2CH MODE

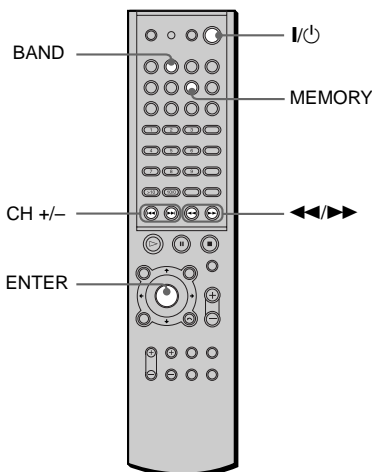
- PLII MOVIE (Pro Logic II Movie): Performs the Pro Logic II movie mode decoding. This setting is ideal for the movies encoded in Dolby Surround. Besides, this mode can reproduce the sound in 5.1 channel when watching the videos of old movies or in the dubbed language.
- PLII MUSIC (Pro Logic II Music): Performs the Pro Logic II music mode decoding. This setting is ideal for the normal stereo sources, such as CDs.
- PRO LOGIC: Performs the Pro Logic decoding. The source recorded in 2 channel is decoded into 4 channels.

■Note

Dolby Pro Logic II does not function for DTS or MPEG format signals or Super Audio CD.

Presetting Radio Stations

You can preset 20 stations for FM and 10 stations for AM.
Before tuning, make sure to turn down the volume to minimum.

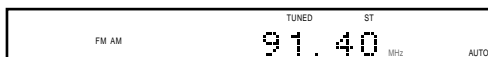


- 1 Press BAND repeatedly until the band you want appears on the front panel display.**

Every time you press BAND, the band changes to AM or FM alternately.

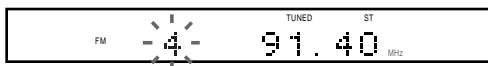
- 2 Press and hold ◀◀ or ▶▶ until the frequency indication starts to change, then release.**

Scanning stops when the receiver tunes in a station. “TUNED” and “ST” (for stereo program) appear on the front panel display.



- 3 Press MEMORY.**

A preset number appears on the front panel display.

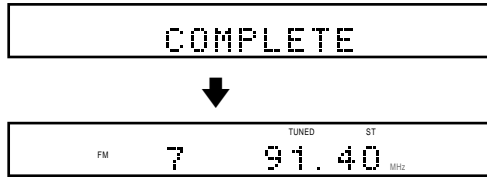


- 4 Press CH + or - to select the preset number you want.**



5 Press ENTER.

The station is stored.



6 Repeat 1 to 5 to store other stations.

To tune in a station with a weak signal

Press ◀◀ or ▶▶ repeatedly in 2 to tune in the station manually.

To change the preset number

Start over from 1.

To change the AM tuning interval

The AM tuning interval is factory set to 9 kHz (10 kHz in some areas).

To change the AM tuning interval, tune in any AM station first, then turn off the receiver by pressing I/⏻ on the remote. While holding down ■ (on the receiver), turn on the power using the remote. When you change the interval, AM preset stations will be erased.

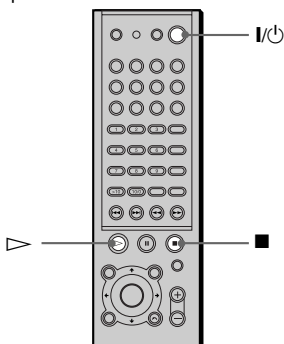
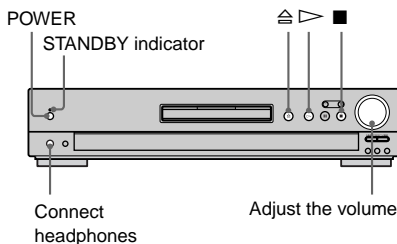
To reset the interval, repeat the same procedure.

Playing Discs



Depending on the DVD or VIDEO CD, some operations may be different or restricted.

Refer to the operating instructions supplied with your disc.



1 Turn on your TV.

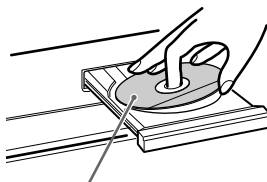
2 Switch the input selector on the TV to this receiver.

3 Press POWER on the receiver.

The receiver enters standby mode and the STANDBY indicator lights up in red.

4 Press on the receiver, and place a disc on the disc tray.

The receiver automatically turns on and the STANDBY indicator turns off.



With the playback side facing down

5 Press .

The disc tray closes, and the receiver starts playback (continuous play). Adjust the volume on the receiver.

After following Step 5

Depending on the disc, a menu may appear on the TV screen. You can play the disc interactively by following the instructions on the menu. DVD (page 33), VIDEO CD (page 34).

To turn on the receiver

Press POWER on the receiver. The receiver enters standby mode and the STANDBY indicator lights up in red. Press on the remote. The receiver turns on and the STANDBY indicator turns off. In standby mode, the receiver also turns on by pressing on the receiver or by pressing .

To turn off the receiver

Press on the remote. The receiver enters standby mode and the STANDBY indicator lights up in red. To turn off the receiver completely, press POWER on the receiver. While playing a disc, do not turn off the receiver by pressing POWER. Doing so may cancel the menu settings. When you turn off the receiver, first press to stop playback and then press on the remote.

Saving the power in standby mode

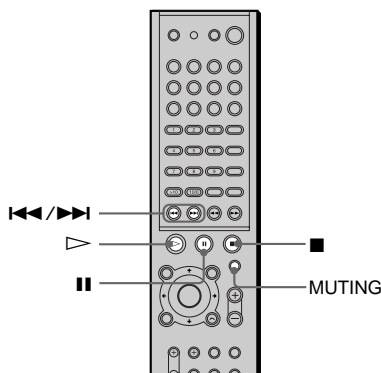
Press **I/⏻** on the remote once.

💡 While the receiver is in standby mode, the STANDBY indicator on the receiver lights up.

To cancel standby mode

Press **I/⏻** on the remote once.

Additional operations



To	Operation
Stop	Press ■ .
Pause	Press II .
Resume play after pause	Press II or ▶ .
Go to the next chapter, track, or scene in continuous play mode	Press ▶▶ .
Go back to the preceding chapter, track, or scene in continuous play mode	Press ◀◀ .
Stop play and remove the disc	Press ⏻ on the receiver.
Mute the sound	Press MUTING . To cancel muting, press it again or turn up the volume.

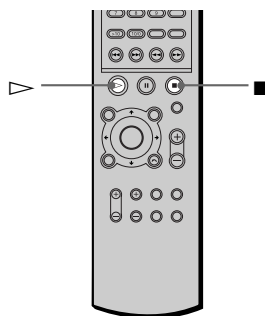
Note

Do not push the disc tray when closing it. Press **⏻** on the receiver to close the disc tray.

Resuming Playback from the Point Where You Stopped the Disc (Resume Play)



When you stop the disc, the receiver remembers the point where you pressed **■** and “RESUME” appears on the front panel display. As long as you do not remove the disc, Resume Play will work even if the receiver enters standby mode by pressing **I/⏻**.



1 While playing a disc, press **■** to stop playback.

“RESUME” appears on the front panel display, so you can restart the disc from the point where you stopped the disc.

If “RESUME” does not appear, Resume Play is not available.

2 Press **▶**.

The receiver starts playback from the point where you stopped the disc in Step 1.

💡 To play from the beginning of the disc, press **■** twice, then press **▶**.

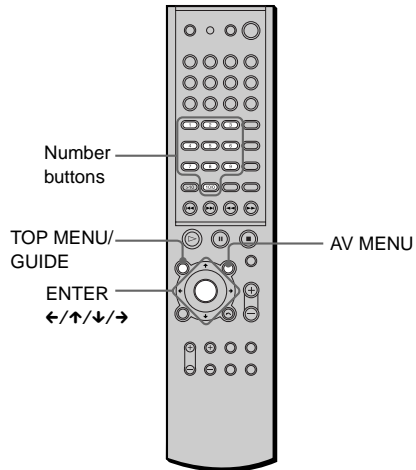
Notes

- Depending on where you stopped the disc, the receiver may not resume playback from exactly the same point.
- The point where you stopped playing is cleared when:
 - you turn the power off by pressing **POWER** on the receiver.
 - you change the play mode.
 - you change the setting on the Setup Menu.

Using the DVD's Menu

DVD

A DVD is divided into long sections of a picture or a music feature called “titles.” When you play a DVD which contains several titles, you can select the title you want using **TOP MENU/GUIDE**. When you play DVDs that allow you to select items such as the language for the subtitles and the language for the sound, select these items using **AV MENU**.



1 Press **TOP MENU/GUIDE** or **AV MENU**.

The disc's menu appears on the TV screen.

The contents of the menu vary from disc to disc.

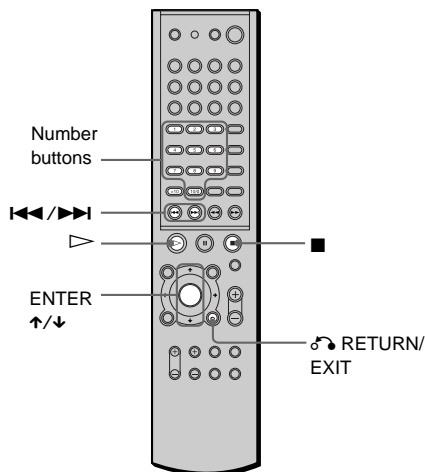
2 Press **←/↑/↓/→** or the number buttons to select the item you want to play or change.

3 Press **ENTER**.

Playing VIDEO CDs with PBC Functions (PBC Playback)

VIDEO
CD

With PBC (Playback Control) functions, you can enjoy simple interactive operations, search functions, and other such operations. PBC playback allows you to play VIDEO CDs interactively by following the menu on the TV screen.



To go back to the menu

Press RETURN/EXIT.

To play without using PBC, press or the number buttons while the receiver is stopped to select a track, then press or ENTER.

“Play without PBC” appears on the TV screen and the receiver starts continuous play. You cannot play still pictures such as a menu. To return to PBC playback, press twice, then press .

Note

Depending on the VIDEO CD, “Press ENTER” in Step 3 may appear as “Press SELECT” in the instructions supplied with the disc. In this case, press .

1 Start playing a VIDEO CD with PBC functions.

The menu for your selection appears.

2 Select the item number you want by pressing or the number buttons.

3 Press ENTER.

4 Follow the instructions in the menu for interactive operations.

Refer to the instructions supplied with the disc, as the operating procedure may differ according to the VIDEO CD.

Playing an MP3 Audio Track

MP3

You can play back data CDs (CD-ROMs/ CD-Rs/CD-RWs) recorded in MP3 (MPEG1 Audio Layer 3) format.

1 Load a data disc recorded in MP3 into the receiver.

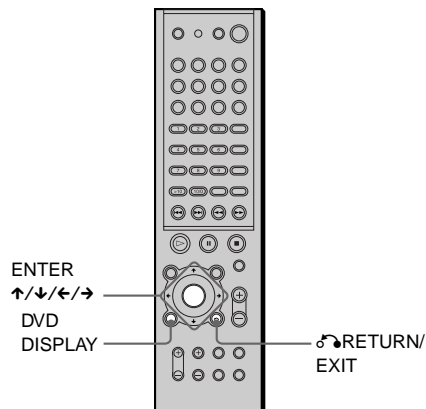
2 Press \blacktriangleright .

The receiver starts to play the first MP3 audio track in the first album on the disc.

Note

The player can play MP3 audio tracks recorded in the following sampling frequencies: 32 kHz, 44.1 kHz, 48 kHz.

Selecting an album and track



1 Press DVD DISPLAY.

The Control Menu and disc name of MP3 data disc appear.

2 Press \uparrow/\downarrow to select  (ALBUM) then press ENTER or \rightarrow .

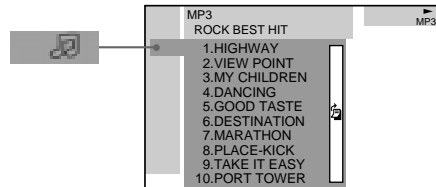
The list of albums contained in the disc appears.



3 Select an album you want to play using \uparrow/\downarrow and press ENTER.

4 Select  (TRACK) using \uparrow/\downarrow and press ENTER.

The list of tracks contained in the current album appears.



When the list of all tracks or albums cannot be displayed on the window, the jump bar appears. Press \rightarrow to select the jump bar icon, and then scroll the jump bar to display the rest of the list using \uparrow/\downarrow .

5 Select a track using \uparrow/\downarrow and press ENTER.

The Selected track starts playing.

To return to the previous display

Press \rightarrow RETURN/EXIT or \leftarrow .

To turn off the display

Press DVD DISPLAY.

Notes

- Only the letters in the alphabet and numbers can be used for album or track names. Anything else is displayed as “ ”.
- If the MP3 file you play back has an ID3 tag, the ID3 tag information is displayed as a track name.

About MP3 audio tracks

You can play MP3 audio tracks on CD-ROMs, CD-Rs, or CD-RWs. However, the discs must be recorded according to ISO9660 level 1, level 2, or Joliet format for the player to recognize the tracks. You can also play discs recorded in Multi Session. See the instructions of the CD-R/RW device or recording software (not supplied) for details on the recording format.

To play a Multi Session CD

This player can play Multi Session CDs when an MP3 audio track is located in the first session. Any subsequent MP3 audio tracks, recorded in the later sessions, can also be played back.

When audio tracks and images in music CD format or video CD format are recorded in the first session, only the first session will be played back.

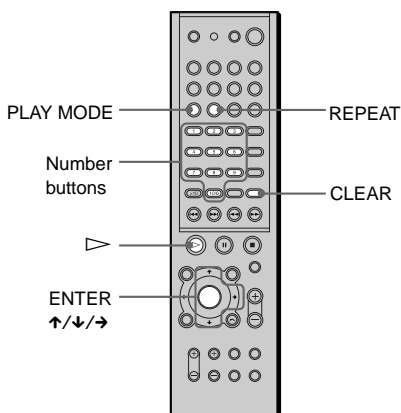
Notes

- If you put the extension “.MP3” to data not in MP3 format, the player cannot recognize the data properly and will generate a loud noise which could damage your speaker system.
- The player cannot play audio tracks in MP3PRO format.

Creating Your Own Program (Program Play)



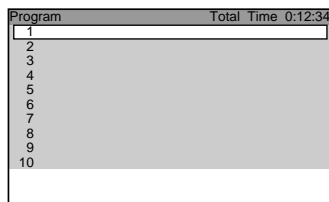
You can play the contents of a disc in the order you want by arranging the order of the tracks on the disc to create your own program. You can program up to 25 tracks.



1

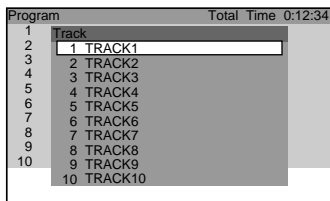
In stop mode, press PLAY MODE repeatedly until “PROGRAM” appears on the front panel display.

The program menu appears on the TV screen.



2 Press →.

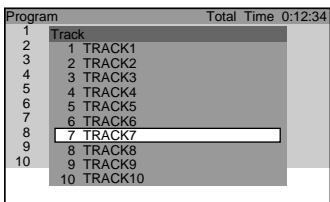
The cursor moves to the track (in this case, “1”). Before programming the MP3 tracks, it is required to select the album.



When the list of all tracks or albums cannot be displayed on the window, the jump bar appears. Press → to select the jump bar icon, and then scroll the jump bar to display the rest of the list using ↑/↓.

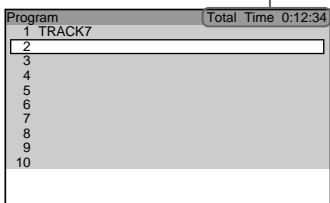
3 Select the track you want to program.

For example, select track “7.”



4 Press ↑/↓ or the number buttons to select “7” then press ENTER.

Total time of the programmed tracks



5 To program other tracks, repeat Steps 2 to 4.

The programmed tracks are displayed in the selected order.

6 Press ▷ to start Program Play.

Program Play begins.

When the program ends, you can restart the same program again by pressing ▷.

To return to normal play


Press CLEAR during playback.

To turn off the program menu

In stop mode, press PLAY MODE to turn off the program menu.

To cancel the programmed order

Press CLEAR in Step 2, and the last program is canceled one by one.

 You can do Repeat Play of the programmed tracks. Press REPEAT, or set “REPEAT” to “ALL” in the Control Menu display during Program Play.

Notes

- This Programme Play function is not available for DVDs.
- When you program MP3 tracks, “-:-:--” is displayed as the total time of the programmed tracks.

Playing in random order

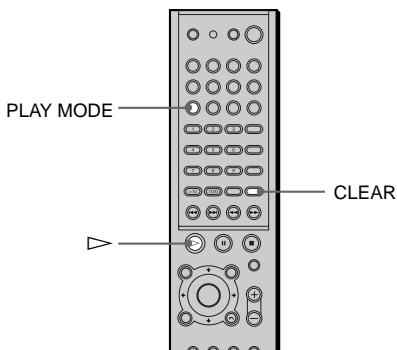
(Shuffle Play)

VIDEO
CD

SA-CD
CD

MP3

You can have the receiver “shuffle” tracks and play them in random order. Subsequent “shuffling” may produce a different playing order.



- 1 In stop mode, press **PLAY MODE** repeatedly until “SHUFFLE” appears on the front panel display.

When you play an MP3 disc, you can play all tracks in Albums in a random order.

- 2 Press **▷**.

To return to normal play

In stop mode, press **PLAY MODE** three times to cancel **SHUFFLE** or twice to cancel **SHUFFLE (ALBUM)**. Or during playback, press **CLEAR** to return to normal play.

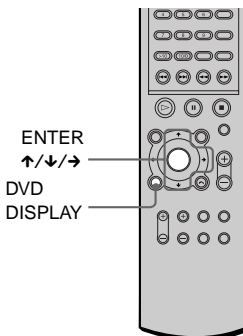
Note

Shuffle Play is cancelled when:

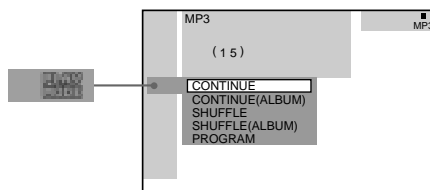
- you eject the disc.
- you turn the power off.
- you change the function.

Setting the shuffle mode on the Control Menu

You can select the normal shuffle and album shuffle (MP3 only).



- 1 Press **DVD DISPLAY**.
The Control Menu appears.
- 2 Press **↑/↓** to select **SHUFFLE** (PLAY MODE), then press **ENTER** or **→**.



- 3 Select **SHUFFLE** or **SHUFFLE (ALBUM)** using **↑/↓** and press **ENTER**.
- 4 Press **▷**.
The selected shuffle play begins.

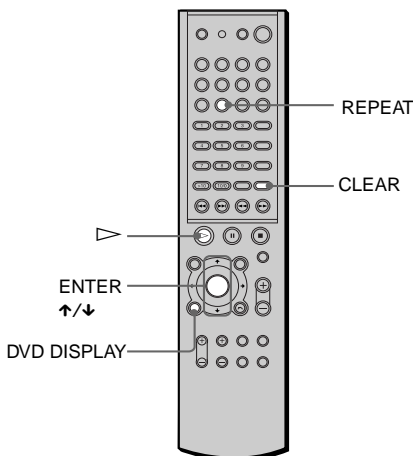
Playing repeatedly (Repeat Play)

Play) DVD VIDEO CD SA-CD CD MP3

You can play all the titles/tracks or a single title/chapter/track on a disc.

In Shuffle or Program Play mode, the receiver repeats tracks in the shuffled or programmed order.

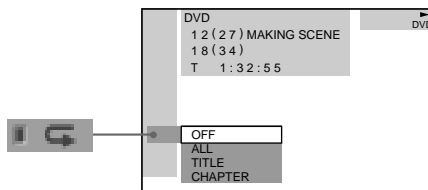
You cannot perform Repeat Play during PBC playback of VIDEO CDs (page 34).



1 Press DVD DISPLAY.
The Control Menu appears.

2 Press ↑/↓ to select (REPEAT), then press ENTER.
If you do not select “OFF,” the indicator of the “REPEAT” lights in green.

3 Select the Repeat Play setting.



When playing a DVD

- **OFF:** does not play repeatedly.
- **ALL:** repeats all the titles.
- **TITLE:** repeats the current title on a disc.
- **CHAPTER:** repeats the current chapter.

When playing a VIDEO CD/Super Audio CD/CD/MP3 and when Program Play is set to OFF

- **OFF:** does not play repeatedly.
- **ALL:** repeats all the tracks on the disc, or repeats the current album (MP3 only).
- **TRACK:** repeats the current track.

When Program Play is set to ON

- **OFF:** does not play repeatedly.
- **ALL:** repeats Program Play.

To cancel Repeat Play

Press CLEAR.

You can set Repeat Play during stop mode

After selecting the “REPEAT” item, press ▷. The receiver starts Repeat Play.

You can quickly display the “REPEAT” status

Press REPEAT on the remote.

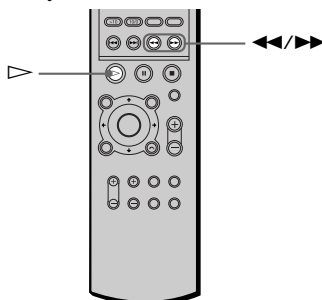
Note

Repeat play does not work when a DVD disc does not contain any chapters.

Searching for a Particular Point on a Disc (Scan, Slow-motion Play)



You can locate a particular point on a disc quickly by monitoring the picture or playing back slowly.



Notes

- Depending on the DVD/VIDEO CD, you may not be able to do some of the operations described.
- This function does not work when you play an MP3 disc.

Locating a point quickly by playing a disc in fast forward or fast reverse (Scan)

Press ◀◀ or ▶▶ while playing a disc. When you find the point you want, press ▷ to return to normal speed. Each time you press ◀◀ or ▶▶ during scan, the playback speed changes. Two speeds are available. With each press, the indication changes as follows:

Playback direction

FF1 ▶▶ → FF2 ▶▶

Opposite direction

FR1 ◀◀ → FR2 ◀◀

The FF2 ▶▶/FR2 ◀◀ playback speed is faster than FF1 ▶▶/FR1 ◀◀.

Watching frame by frame (Slow-motion play) DVD VIDEO CD

You can use this function only for DVDs or VIDEO CDs. Press ◀◀ or ▶▶ when the receiver is in the pause mode. To return to normal speed, press ▷.

Each time you press ◀◀ or ▶▶ during Slow-motion play, the playback speed changes. Two speeds are available. With each press, the indication changes as follows:

Playback direction

SLOW 2 ▶▶ → SLOW 1 ▶▶

Opposite direction (DVD only)

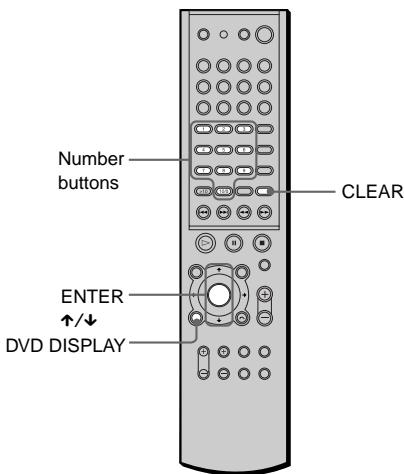
SLOW 2 ◀◀ → SLOW 1 ◀◀

The SLOW 2 ▶▶/SLOW 2 ◀◀ playback speed is slower than SLOW 1 ▶▶/SLOW 1 ◀◀.

Searching for a Title/Chapter/Track/Index/Album



You can search a title (DVD), chapter (DVD), track (CD, VIDEO CD, Super Audio CD, MP3), index (VIDEO CD, Super Audio CD), and album (MP3). As titles, tracks and albums are assigned unique names on the disc, you can select the desired one from the Control Menu. Also chapters and indexes are assigned unique numbers on the disc, so you select the desired one by entering its number. Or you can search a particular point using the time code. (TIME SEARCH)



Searching for a title/track/album

1 Press DVD DISPLAY.

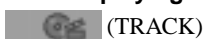
The Control Menu appears.

2 Press \uparrow/\downarrow to select the search method, then press ENTER.

■ When playing a DVD



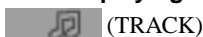
■ When playing a VIDEO CD



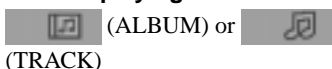
■ When playing a Super Audio CD



■ When playing a CD

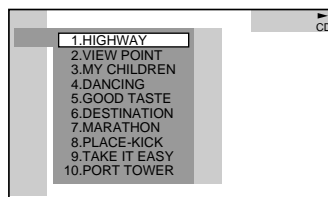


■ When playing an MP3

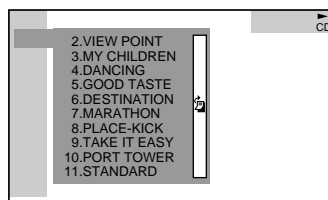


Example: when you select

The list of tracks contained in the disc appears.



When the list of all tracks or albums cannot be displayed on the window, the jump bar appears. Press \rightarrow to select the jump bar icon, and then scroll the jump bar to display the rest of the list using \uparrow/\downarrow .



3 Press \uparrow/\downarrow to select the desired track, then press ENTER.

The receiver starts playback from the selected track.

Searching for a chapter/index

1 Press DVD DISPLAY.

The Control Menu appears.

2 Press \uparrow/\downarrow to select the search method.

■ When playing a DVD



(CHAPTER)

■ When playing a VIDEO CD



(INDEX)

■ When playing a Super Audio CD



(INDEX)

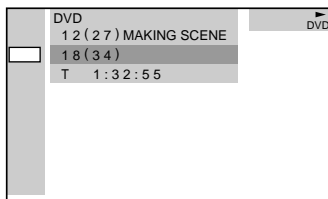
Example: when you select



(CHAPTER)

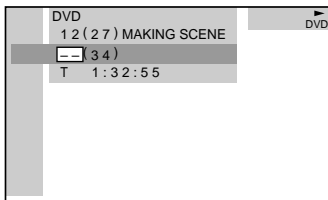
“** (**)” is selected (** refers to a number).

The number in parentheses indicates the total number of titles, chapters, tracks, or indexes.



3 Press ENTER.

“** (**)” changes to “— (**)”.



4 Press \uparrow/\downarrow or the number buttons to select the chapter or index number you want to search.

If you make a mistake

Cancel the number by pressing

CLEAR, then select another number.

5 Press ENTER.

The receiver starts playback from the selected number.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu is turned off.

To search for a particular point using the time code (TIME SEARCH)

1 In Step 2, select (TIME).

“T **:**:~” (playing time of the current title or track) is selected.

2 Press ENTER.

“T **:**:~” changes to “T --:--:~”.

3 Input the time code using the number buttons, then press ENTER.

For example, to find the desired point at 2 hours, 10 minutes, and 20 seconds after the beginning, just enter “2:10:20.”

Notes

- The title, chapter or track number displayed on the TV screen is the recorded data on the disc.
- You cannot search a scene of a VIDEO CD.

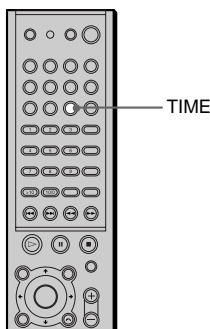
Viewing the Playing Time and Remaining Time on the Front Panel Display

DVD

VIDEO
CDSA-CD
CD

MP3

You can check information about the disc, such as the remaining time, total number of titles of a DVD, or tracks of a Super Audio CD, CD, VIDEO CD, or MP3 using the front panel display (page 11).



Press TIME.

Each time you press TIME while playing the disc, the display changes as shown in the following charts.

When playing a DVD

Playing time and number of the current title

TITLE	CHAPTER	H	M	S
1	2	1	03	24

Remaining time of the current title

TITLE	CHAPTER	H	M	S
1	2	-1	15	36

Playing time and number of the current chapter

CHAPTER	H	M	S
2	02	23	0

Remaining time of the current chapter

CHAPTER	H	M	S
2	-01	32	0

Title name

SONY HITS/

When playing a VIDEO CD (without PBC functions), Super Audio CD or CD

Playing time and current track number

TRACK	INDEX	M	S
2	1	22	5

Remaining time of the current track

TRACK	INDEX	M	S
2	1	-1	50

Playing time of the disc

M	S
32	12

Remaining time of the disc

M	S
-20	18

Track name

SONY HITS/

When playing an MP3

Playing time and current track number

TRACK	M	S
2	2	25

Remaining time of the current track

TRACK	M	S
2	-	1:50

Track (file) name

M	S
VIEW POINT	


Album (folder) name

SONY HITS/

Notes

- ID3 tag applies only to version 1.
- If the MP3 file you play back has an ID3 tag, the ID3 tag information is displayed as a track (file) name.
- The ID3 tag character codes comply with ASCII and ISO standards. Joliet format discs can only be displayed in ASCII. Incompatible characters will be displayed as “ ”.
- In the following cases, elapsed playing time and time of the track remaining may not be displayed accurately.
 - when an MP3 file of VBR (variable bit rate) is played.
 - during fast-forward/reverse.

 When playing VIDEO CDs with PBC functions, the playing time are displayed.

 The playing time and remaining time of the current chapter, title, track, scene, or disc will also appear on your TV screen. See the following section “Checking the Playing Time and Remaining Time” for instructions on how to read this information.

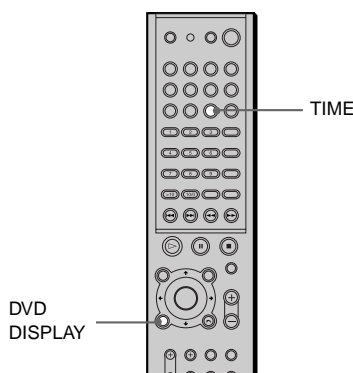
Notes

- While playing Super Audio CD, the index indicator does not appear on the front panel display.
- Depending on the type of disc being played and the playing mode, the disc information may not be displayed.

Checking the Playing Time and Remaining Time

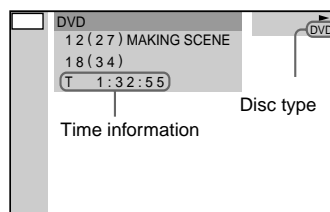
DVD VIDEO SA-CD CD MP3

You can check the playing time and remaining time of the current title, chapter, or track, and the total playing time or remaining time of the disc. You can also check the DVD/CD/Super Audio CD text and MP3 folder name/file name/ID3 tag (only song title) recorded on the disc.



1 Press DVD DISPLAY during playback.

The Control Menu appears.



2 Press TIME repeatedly to change the time information.

The display and the kinds of time that you can change depend on the disc you are playing.

■ When playing a DVD

- T **:**:**
Playing time of the current title
- T-**:**:**
Remaining time of the current title
- C **:**:**
Playing time of the current chapter
- C-**:**:**
Remaining time of the current chapter

■ When playing a VIDEO CD (with PBC functions)

- **:**:**
Playing time of the current scene

■ When playing a VIDEO CD (without PBC functions), Super Audio CD or CD

- T **:**:**
Playing time of the current track
- T-**:**:**
Remaining time of the current track
- D **:**:**
Playing time of the current disc
- D-**:**:**
Remaining time of the current disc

■ When playing an MP3

- T **:**:**
Playing time of the current track
- T-**:**:**
Remaining time of the current track

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu is turned off.

Notes

- Only letters of the alphabet can be displayed.
- Depending on the type of disc being played, the receiver can only display a limited number of characters. Also, depending on the disc, all text characters are not displayed.

Changing the Sound

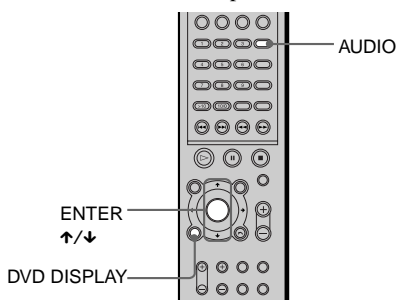


If a DVD is recorded with multilingual tracks, you can select the language you want while playing the DVD.


If the DVD is recorded in multiple audio formats (PCM, Dolby Digital, MPEG audio, or DTS), you can select the audio format you want while playing the DVD.

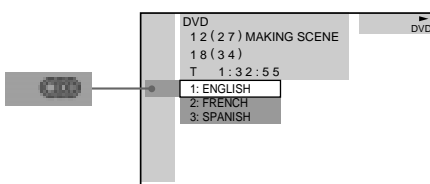
With stereo CDs or VIDEO CDs, you can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers. (In this case, the sound loses its stereo effect.)

For example, when playing a disc containing a song with the vocals on the right channel and the instruments on the left channel, you can select the left channel and hear only the instruments from both speakers.



- 1 Press DVD DISPLAY during playback.**
The Control Menu is displayed.

- 2 Press \uparrow/\downarrow to select  (AUDIO), then press ENTER.**
The options for AUDIO appear.



- 3 Press \uparrow/\downarrow to select the desired audio signal.**

■ When playing a DVD

Depending on the DVD, the choice of language varies.

When 4 digits are displayed, they represent the language code. Refer to the language code list on page 81 to see which language the code represents. When the same language is displayed two or more times, the DVD is recorded in multiple audio formats.

■ When playing a VIDEO CD, or CD

The default setting is underlined.

- STEREO: The standard stereo sound
- 1/L: The sound of the left channel (monaural)
- 2/R: The sound of the right channel (monaural)

■ When playing a Super Audio CD

In stop mode, depending on the Super Audio CD, the choice of settings varies.

- MULTI: The disc has multi-channel playback area
- 2CH: The disc has the 2 channel playback area.
- CD: When you want to play the disc as a conventional CD.


Note

Not all discs give you the three choices above when in Super Audio CD playback. It all depends on the layer configuration of the Super Audio CD to be played.

- 4 Press ENTER.**

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu is turned off.

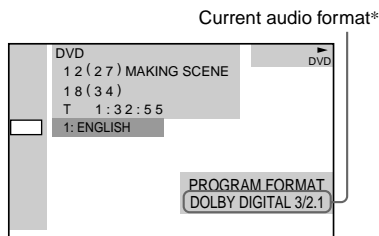
 You can select AUDIO directly by pressing AUDIO. Each time you press the button, the item changes.

Notes

- For discs not in multiple audio format, you cannot change the sound.
- During DVD playback, the sound may change automatically.

Displaying the audio information of the disc

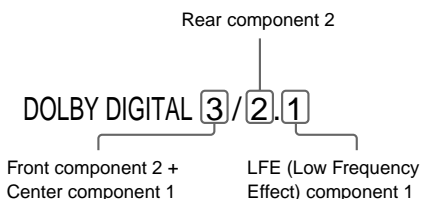
When you select “AUDIO,” the channels being played are displayed on the screen. For example, in Dolby Digital format, multiple signals ranging from monaural to 5.1 channel signals can be recorded on a DVD. Depending on the DVD, the number of recorded channels may differ.



*“PCM,” “MPEG,” “DTS,” or “DOLBY DIGITAL” is displayed.

For “DOLBY DIGITAL,” the channels in the playing track are displayed numerically as follows:

For Dolby Digital 5.1 ch:



The display examples are as follows:

- PCM (stereo)

PROGRAM FORMAT
PCM 48kHz 24bit

- Dolby Surround

PROGRAM FORMAT
DOLBY DIGITAL 2/0
DOLBY SURROUND

- Dolby Digital 5.1ch

PROGRAM FORMAT
DOLBY DIGITAL 3/2.1

- DTS

PROGRAM FORMAT
DTS 3/2.1

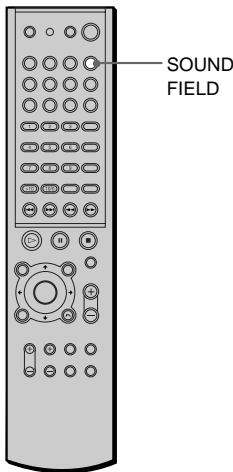
Notes

- When the signal contains rear signal components such as LS, RS, or S, the surround effect is enhanced.
- If you play MPEG AUDIO sound tracks, the receiver outputs PCM (stereo) signals.

Automatically decoding the input audio signal (Auto Decoding)



The auto decoding function automatically detects the type of audio signal being input (Dolby Digital, DTS, or standard 2 channel stereo) and performs the proper decoding if necessary. This mode presents the sound as it was recorded/encoded, without adding any effects (e.g. reverberation). However, if there are no low frequency signals (Dolby Digital LFE, etc.), it will generate a low frequency signal for output to the subwoofer.



Press AUTO DEC on the receiver or SOUND FIELD on the remote repeatedly until “AUTO DECO.(AUTO DECODING)” appears on the front panel display.
The auto format decode function is activated.

Enjoying Surround Sound

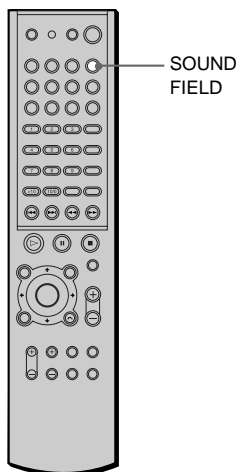
DVD VIDEO CD CD MP3

You can take advantage of surround sound simply by selecting one of the receiver’s pre-programmed sound fields. They bring the exciting and powerful sound of movie theaters and concert halls into your home. To select the sound field, press AUTO DEC, 2CH ST, or MODE on the receiver or SOUND FIELD on the remote repeatedly until the sound field you want appears on the front panel display.

Sound field	Display
Auto Decoding	AUTO DECO.
Normal surround	N.SURROUND
Cinema Studio EX A	C.S.EX A*
Cinema Studio EX B	C.S.EX B*
Cinema Studio EX C	C.S.EX C*
Hall	HALL
Jazz Club	JAZZ CLUB
Live Concert	L.CONCERT
Game	GAME
2ch Stereo	2CH STEREO

* Use DCS Technology

About DCS (Digital Cinema Sound)
In the collaboration with Sony Pictures Entertainment, Sony measured the sound environment of their studios and integrated the data of the measurement and Sony’s own DSP (Digital Signal Processor) technology to develop “Digital Cinema Sound”. “Digital Cinema Sound” simulates in a home theater an ideal movie theater sound environment based on the preference of movie director.



Enjoying movies with Cinema Studio EX

Cinema Studio EX is ideal for enjoying the movie software encoded with multi channel format, such as the Dolby Digital DVD. This mode reproduces the sound characteristics of Sony Pictures Entertainment's studios.

Press MODE on the receiver or SOUND FIELD on the remote repeatedly until "C.S.EX A (or B, C)" appears on the front panel display.

C.S.EX A (Cinema Studio EX A)

Reproduces the sound characteristics of the Sony Pictures Entertainment "Cary Grant Theater" cinema production studio. This is a standard mode, great for watching most any type of movie.

C.S.EX B (Cinema Studio EX B)

Reproduces the sound characteristics of the Sony Pictures Entertainment "Kim Novak Theater" cinema production studio. This mode is ideal for watching science-fiction or action movies with lots of sound effects.

C.S.EX C (Cinema Studio EX C)

Reproduces the sound characteristics of the Sony Pictures Entertainment scoring stage. This mode is ideal for watching musicals or classic films where music is featured in the soundtrack.

About Cinema Studio EX

Cinema Studio EX consists of the following three elements.

- **Virtual Multi Dimension**
Creates 5 sets of virtual speakers surrounding the listener from a single pair of actual rear speakers.
- **Screen Depth Matching**
In a movie theater, sound seems to come from inside the image reflected on the movie screen. This element creates the same sensation in your listening room by shifting the sound of the front speakers "into" the screen.

- **Cinema Studio Reverberation**
Reproduces the reverberations peculiar to a movie theater.

Cinema Studio EX is the integrated mode which operates these elements simultaneously.

Notes

- The effects provided by the virtual speakers may cause increased noise in the playback signal.
- When listening with sound fields that employ the virtual speakers, you will not be able to hear any sound coming directly from the rear speakers.

Selecting other sound fields

Press MODE on the receiver or SOUND FIELD on the remote repeatedly until the sound field you want appears on the front panel display.

The current sound field appears on the front panel display.

N. SURROUND (Normal Surround)

Software with multi channel surround audio signals is played back according to the way it was recorded. Software with 2 channel audio signals is decoded with Dolby Pro Logic or Dolby Pro Logic II to create surround effects (page 28).

HALL (Hall)

Reproduces the acoustics of a rectangular concert hall.

JAZZ CLUB (Jazz Club)

Reproduces the acoustics of a jazz club.

L. CONCERT (Live Concert)

Reproduces the acoustics of a 300-seat live concert.

GAME (Game)

Obtains maximum audio impact from video game software.

HP. THEATER (Headphone Theater)

When you connect your headphone to the PHONES jack of the receiver, the HEADPHONE THEATER mode allows you to experience a theater like environment while listening through a pair of headphones. This mode is very effective with 5.1 ch discrete signal sources like Dolby Digital and DTS. Selecting any Sound Field selections (except AUTO DECODING or 2 CH STEREO) enables the mode.



To turn the surround effect off

Press AUTO DEC or 2CH ST on the receiver or SOUND FIELD on the remote repeatedly until "AUTO DECO." or "2CH STEREO" appears on the front panel display.

The receiver memorises the last sound field selected for each function mode (Sound Field Link)

Whenever you select a function such as DVD or TUNER, the sound field that was last applied to the function is automatically applied again. For example, if you listen to DVD with HALL as the sound field, then change to another function, and then return to DVD, HALL will be applied again. With the tuner, sound fields are memorized separately for all preset stations.

You can identify the encoding format of program software by looking at its packaging

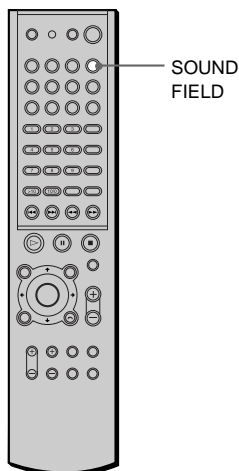
- Dolby Digital discs are labelled with the  logo.
- Dolby Surround encoded programs are labelled with the  logo.
- DTS Digital Surround discs are marked with DTS.

Note

When you play sound tracks with 96 kHz sampling frequency, the output signals will be converted to 48 kHz (sampling frequency).

Using only the front speakers (2 Channel Stereo)

DVD VIDEO CD CD MP3



Press 2CH ST on the receiver or SOUND FIELD on the remote repeatedly until “2CH STEREO” appears on the front panel display.

This mode outputs the sound from the front left and right speakers only. Standard 2 channel (stereo) sources completely bypass the sound field processing. Multi channel surround formats are downmixed to 2 channel.

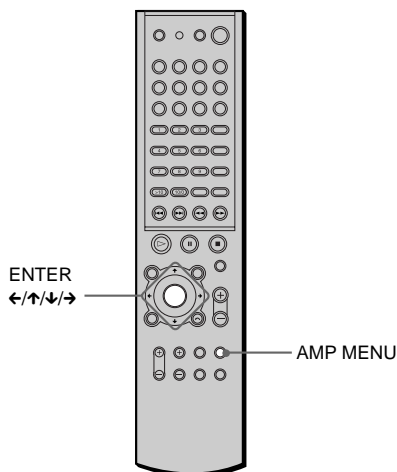
Notes

- To listen to 2 channel (stereo) sources using the front left and right speakers and a sub woofer, press AUTO DEC on the receiver or SOUND FIELD on the remote repeatedly to select “AUTO DECO.”
- Depending on the speaker setting, the sound is output from the sub woofer.

Adjusting the level parameters

DVD VIDEO CD SA-CD CD MP3

The level menu contains parameters that let you adjust the balance and speaker volumes of each speaker (page 27).

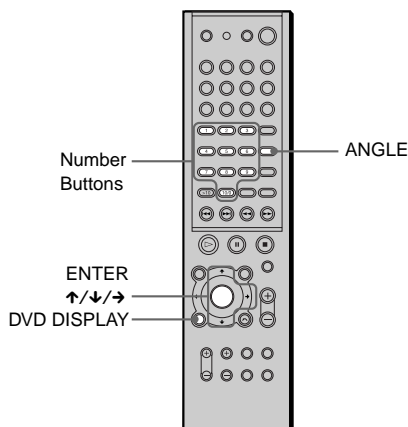


- 1 Start playing a program source encoded with multichannel surround sound.**
- 2 Press AMP MENU repeatedly.**
♪ LEVEL appears on the front panel display.
- 3 Sit in your listening position and select the item to be adjusted using ↑/↓.**
- 4 Adjust the volume level using ←/→.**
The adjusted value will appear on the front panel display. If you do not operate the remote for a few seconds, the value turns off and is stored in the receiver.

Changing the Angles

If various angles (multi-angles) for a scene are recorded on the DVD, “ANGLE” appears in the front panel display. This means that you can change the viewing angle.

For example, while playing a scene of a train in motion, you can display the view from either the front of the train, the left window of the train, or from the right window without having the train’s movement interrupted.

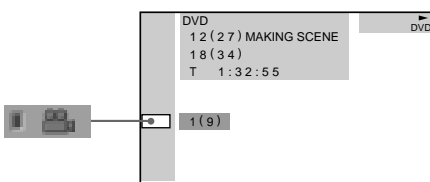


1 Press DVD DISPLAY during playback.

The Control Menu appears.

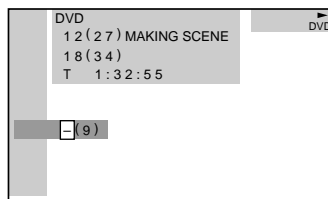
2 Press \uparrow/\downarrow to select (ANGLE).

The angle number appears.
The number in parentheses indicates the total number of angles.



3 Press \rightarrow or ENTER.

The angle number changes to “-.”




4 Select the angle number using the number buttons or \uparrow/\downarrow , then press ENTER.

The angle is changed to the selected angle.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu is turned off.

 You can select the angle directly by pressing ANGLE. Each time you press the button, the angle changes.

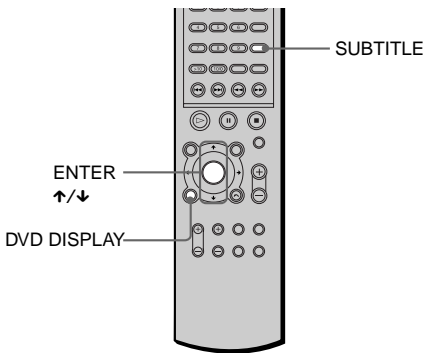
Note

Depending on the DVD, you may not be able to change the angles, even if multi-angles are recorded on the DVD.

Displaying the Subtitles



If subtitles are recorded on the discs, you can turn the subtitles on and off while playing. If multilingual subtitles are recorded on the disc, you can change the subtitle language while playing, or turn the subtitles on or off whenever you want. For example, you can select the language you want to practice and turn the subtitles on for better understanding.

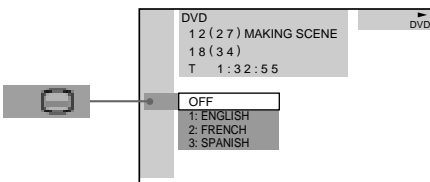


1 Press DVD DISPLAY during playback.

The Control Menu appears.

2 Press \uparrow/\downarrow to select (SUBTITLE), then press ENTER.

The options for SUBTITLE appear.



3 Press \uparrow/\downarrow to select the language.

Depending on the DVD, the choice of language varies.

When 4 digits are displayed, they indicate the language code. Refer to the language code list on page 81 to see which language the code represents.

4 Press ENTER.

To cancel the SUBTITLE setting

Select “OFF” in Step 3.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu is turned off.

You can select SUBTITLE directly by pressing SUBTITLE. Each time you press the button, the item changes.

Note

Depending on the DVD, you may not be able to change the subtitles even if multilingual subtitles are recorded on it.

Locking Discs (CUSTOM PARENTAL CONTROL, PARENTAL CONTROL)

You can set two kinds of playback restrictions for a disc.

- Custom Parental Control

You can set the playback restrictions so that the receiver will not play inappropriate discs.

- Parental Control

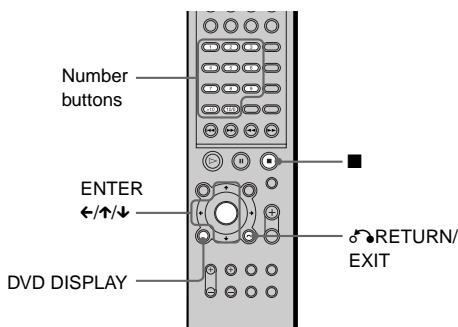
Playback of some DVDs can be limited according to a predetermined level such as the age of the users.

The same password is used for both Parental Control and Custom Parental Control.

Custom Parental Control



You can set the same Custom Parental Control password for up to 25 discs. When you set the 26th disc, the playback restriction of the disc for which you first set the password is canceled.



1 Insert the disc you want to lock.

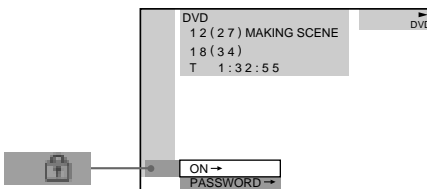
If the disc is playing, press **■** to stop playback.

2 In stop mode, press DVD DISPLAY.

The Control Menu appears.

3 Press \uparrow/\downarrow to select **■ (CUSTOM PARENTAL), then press ENTER.**

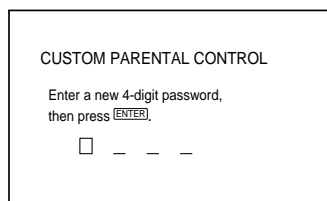
“CUSTOM PARENTAL” is selected.



4 Press \uparrow/\downarrow to select “ON \rightarrow ,” then press ENTER.

■When you have not entered a password

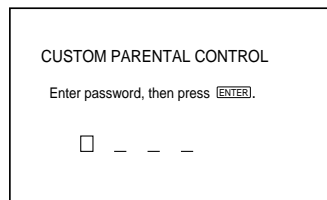
The display for registering a new password appears.



Enter a 4-digit password by using the number buttons, then press ENTER. The display for confirming the password appears.

■When you have already registered a password

The display for entering the password appears.



5 Enter or re-enter your 4-digit password by using the number buttons, then press ENTER.

“Custom parental control is set.” appears and the screen returns to the Control Menu display.

If you make a mistake entering your password

Press **←** before you press ENTER and input the correct number.

If you make a mistake

Press **↵** RETURN/EXIT, then start from Step 3 again.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu is turned off.

To turn off the Custom Parental Control function

- 1 In Step 4, select “OFF →,” then press ENTER.
- 2 Enter your 4-digit password using the number buttons, then press ENTER.

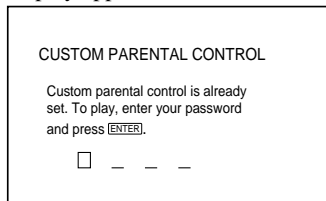
To change the password

- 1 In Step 4, press **↑/↓** to select “PASSWORD →,” then press ENTER. The display for entering the password appears.
- 2 Enter your 4-digit password using the number buttons, then press ENTER.
- 3 Enter a new 4-digit password using the number buttons, then press ENTER.
- 4 To confirm your password, re-enter it using the number buttons, then press ENTER.

Playing the disc for which Custom Parental Control is set

1 Insert the disc for which Custom Parental Control is set.

The CUSTOM PARENTAL CONTROL display appears.



2 Enter your 4-digit password using the number buttons, then press ENTER.

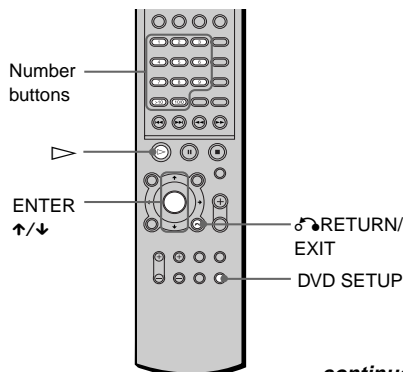
The receiver is ready for playback.

💡 If you forget your password, enter the 6-digit number “199703” using the number buttons when the CUSTOM PARENTAL CONTROL display asks you for your password, then press ENTER. The display will ask you to enter a new 4-digit password.

Limiting playback for children (Parental Control) **DVD**

Playback of some DVDs can be limited according to a predetermined level such as the age of the users. The “Parental Control” function allows you to set a playback limitation level.

A scene that is limited is not played, or it is replaced by a different scene.

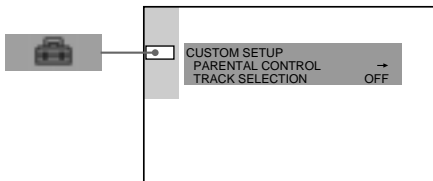


1 In stop mode, press DVD SETUP.

The Setup Display appears.

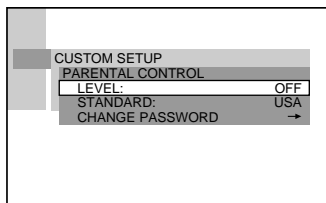
2 Press \uparrow/\downarrow to select "CUSTOM SETUP," then press ENTER.

"CUSTOM SETUP" is displayed.



4 Enter or re-enter your password using the number buttons, then press ENTER.

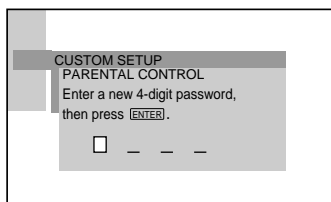
The display for setting the playback limitation level and changing the password appears.



3 Press \uparrow/\downarrow to select "PARENTAL CONTROL →," then press ENTER.

■ If you have not entered a password

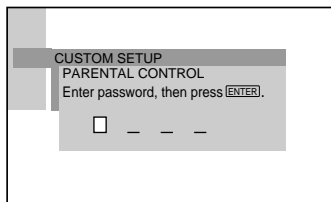
The display for registering a new password appears.



Enter a 4-digit password using the number buttons, then press ENTER.
The display for confirming the password appears.

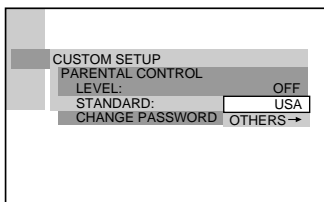
■ When you have already registered a password

The display for entering the password appears.



5 Press \uparrow/\downarrow to select "STANDARD," then press ENTER.

The selection items for "STANDARD" are displayed.



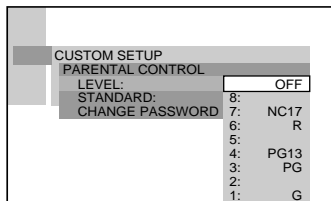
6 Press \uparrow/\downarrow to select a geographic area as the playback limitation level, then press ENTER.

The area is selected.

If you select "OTHERS →," select and enter the standard code in the table on page 58 using the number buttons.

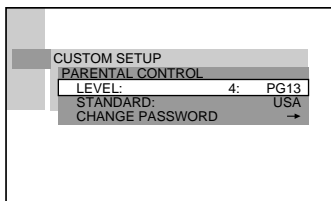
7 Press \uparrow/\downarrow to select “LEVEL,” then press ENTER.

The selection items for “LEVEL” are displayed.



8 Select the level you want using \uparrow/\downarrow , then press ENTER.

Parental Control setting is complete.



The lower the value, the more strict the limitation.

If you make a mistake

Press \leftarrow RETURN/EXIT to go back to the previous screen.

To turn off the Setup Display

Press DVD SETUP repeatedly until the Setup Display is turned off.

To turn off the Parental Control function and play the DVD after entering your password

Set “LEVEL” to “OFF” in Step 8.

To change the password

1 In Step 5, select “CHANGE PASSWORD \rightarrow ” using \downarrow , then press ENTER.

The display for entering the password appears.

2 Follow Step 3 to enter a new password.

Playing the disc for which Parental Control is set

1 Insert the disc and press \triangleright .

The PARENTAL CONTROL display appears.

2 Enter your 4-digit password using the number buttons, then press ENTER.

The receiver starts playback.

If you forget your password, remove the disc and repeat Step 1 to 5 of “Limiting playback for children.” When you are asked to enter your password, enter “199703” using the number buttons, then press ENTER. The display will ask you to enter a new 4-digit password. After you enter a new 4-digit password in Step 3, replace the disc in the receiver and press \triangleright . When the PARENTAL CONTROL display appears, enter your new password.

Notes

- When you play DVDs which do not have the Parental Control function, playback cannot be limited on this receiver.
- Depending on the DVD, you may be asked to change the parental control level while playing the disc. In this case, enter your password, then change the level. If the Resume Play mode is cancelled, the level returns to the original level.

Area Code


Standard	Code number	Standard	Code number
Argentina	2044	Korea	2304
Australia	2047	Malaysia	2363
Austria	2046	Mexico	2362
Belgium	2057	Netherlands	2376
Brazil	2070	New Zealand	2390
Canada	2079	Norway	2379
Chile	2090	Pakistan	2427
China	2092	Philippines	2424
Denmark	2115	Portugal	2436
Finland	2165	Russia	2489
France	2174	Singapore	2501
Germany	2109	Spain	2149
Hong Kong	2219	Sweden	2499
India	2248	Switzerland	2086
Indonesia	2238	Taiwan	2543
Italy	2254	Thailand	2528
Japan	2276	United Kingdom	2184

Controlling the TV or Satellite Receiver with the Supplied Remote

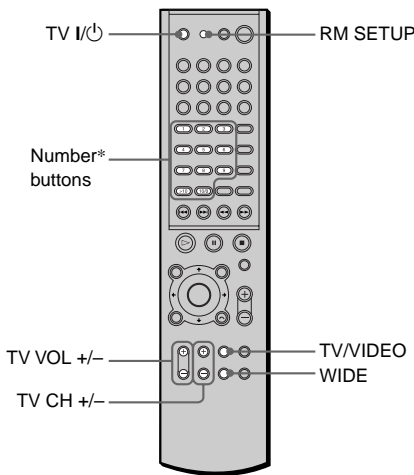
By adjusting the remote signal, you can control your TV or satellite receiver with the supplied remote.

Notes

- If you enter a new code number, the code number previously entered will be erased.
- When you replace the batteries of the remote, the code number may be reset to the default (SONY) setting. Reset the appropriate code number.

 You can set the code number for your TV or satellite receiver separately.

Controlling TVs with the remote



- 1 Press TV I/⏻ and RM SETUP simultaneously.**
The SETUP indicator lights up.
- 2 Enter your TV's manufacturer's code (see the table) using the number**
The SET UP indicator flashes twice.

* Use the number buttons only to enter the code number of controllable TVs.

Code numbers of controllable TVs

If more than one code number is listed, try entering them one at a time until you find the one that works with your TV.

Manufacturer	Code number
AIWA	17
AKAI	22
AOC	22
CENTURION	28
COLONAD	21
CURTIS-MATHES	28
Daytron	28
EMERSON	21, 22, 30
FISHER	27
FUJITSU	11
FUNAI	14
General Electric	24, 26
GOLD STAR (LG)	21, 22, 32
GRUNDIG	44
HITACHI	04, 21, 51
J.C.Penney	22, 28
JVC	06
KMC	21
LOEWE	56
MAGNAVOX	21, 25, 28
MARANTZ	22, 29
MGA/MITUBISHI	22, 28, 29, 32
NEC	09, 22, 28
NOKIA	47, 48, 58
PANASONIC (MATSUSHITA)	02, 13, 24, 57
Philico	21, 22
PHILIPS	25, 34, 41, 42, 43
PIONEER	10
Portland	21
QUASAR	08, 24

RADIO SHACK	23, 30
RCA	22, 26
SABA	45, 46
SAMPO	28
SAMSUNG	18, 33, 49, 50
SANYO	07, 15, 27, 52
SCOTT	28
SEARS	03, 26, 27
SHARP	08, 16, 21, 23
SONY	01 (default), 12
SYLVANIA	25, 28
TEKNIKA	21, 25, 30
TELEFUNKEN	53
THOMSON	55
TOSHIBA	03, 54
WARDS	21, 22, 28
YORX	28
ZENITH	31

Controlling the TV

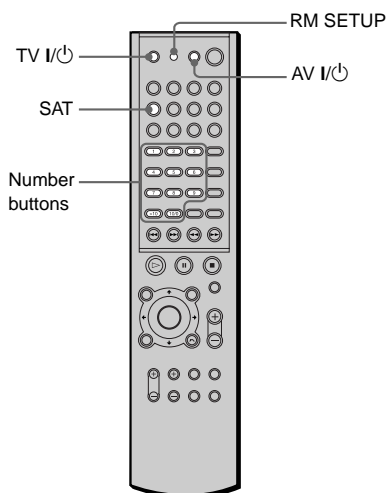
You can control your TV using the buttons below.

By pressing	You can
TV I/⏻	Turn the TV on or off.
TV/VIDEO	Switch the TV's input source between the TV and other input sources.
TV VOL +/-	adjust the TV volume.
TV CH +/-	change the TV channel.
WIDE	change the aspect ratio of your TV.

Note

Depending on the TV, you may not be able to control your TV or to use some of the buttons above.

Controlling satellite receivers with the remote



Note

For details about buttons that can operate the satellite receiver, see page 63.

1 Press AV I/⏻ and RM SETUP simultaneously.

The SETUP indicator lights up.

2 Enter your manufacturer's code (see the table) using the number

The SET UP indicator flashes twice.

Code numbers of controllable satellite receiver

If more than one code number is listed, try entering them one at a time until you find the one that works with your satellite receiver.

Manufacturer	Code number
SONY	61, 62, 63, 64
RCA	65, 79
JERROLD/GI	66, 67, 68, 69, 70, 71, 72, 73, 74
SATLANTA	75, 76, 77
PANASONIC (MATSUSHITA)	78

Controlling the satellite receiver

Press SAT.
Each time you press SAT, the controllable source on the remote changes as follows:

The receiver (AVD-S50ES)
(SETUP indicator flashes once.)



Your satellite receiver
(SETUP indicator flashes twice.)

You can control your satellite receiver using the buttons below.

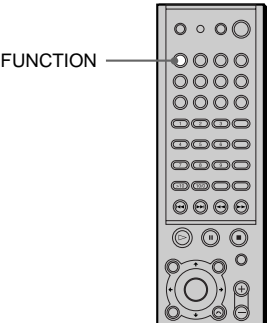
By pressing	You can
AV I/⏻	Turn the satellite receiver on or off.
DISPLAY	Change the display.
TIME	Return to the previous channel.
Number buttons	Select the channel.
ENTER	Confirms the selected channel .
AUDIO	Change the audio.
SUBTITLE	Display the subtitle or not.
CH +/-	Change the channel.
TOP MENU/ GUIDE	Display the program guide.
AV MENU	Display the menu.
DVD DISPLAY	Change the display.
↶⏮ RETURN	Return to the previous display in the program guide or menu.
⏮↶/↷↵/↷	Select the item in the program guide or menu.
ENTER	

Note

Depending on the satellite receiver, you may not be able to control your satellite receiver or to use some of the buttons above.

Using the Video or other Unit

You can use VCRs or other units connected to the VIDEO, TV/SAT, AUX, or MD/DAT jacks. Refer to the operation manual supplied with the unit for further information on the operation.



Press FUNCTION repeatedly until the desired source that you connected to the receiver appears on the front panel display.

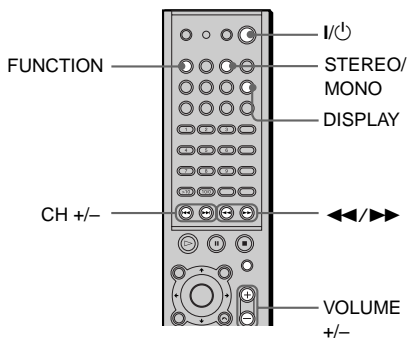
Each time you press FUNCTION, the mode of the receiver changes in the following sequence.

DVD → VIDEO → TV/SAT → AUX → MD/DAT → TUNER → DVD...

Using Various Additional Functions

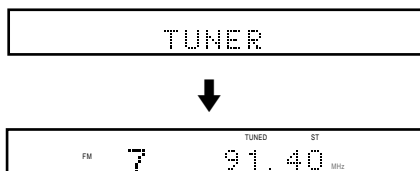
Listening to the Radio

Preset radio stations in the receiver's memory first (see "Presetting Radio Stations" on page 29).



1 Press FUNCTION repeatedly until "TUNER" appears on the front panel display.

The last received station is tuned in.



2 Press CH + or – repeatedly to select the preset station you want.

Each time you press the button, the receiver tunes in one preset station.

3 Adjust the volume by pressing VOLUME +/-.

To turn off the radio

Press I/⏻.

To listen to non-preset radio stations

Use manual or automatic tuning in Step 2.

For manual tuning, press ◀ or ▶ on the remote repeatedly.

For automatic tuning, press and hold ◀ or ▶ on the remote.

💡 If an FM program is noisy

Press STEREO/MONO on the remote so that "MONO" appears on the front panel display. There will be no stereo effect, but the reception will improve. Press the button again to restore the stereo effect.

💡 To improve reception

Reorient the supplied antennas.

To check the frequency or sound field

Press DISPLAY repeatedly.

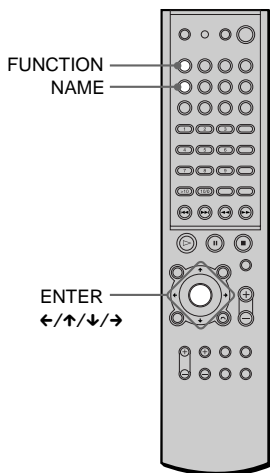
Each time you press DISPLAY, the front panel display changes as follows:
index name of the station* → frequency →
sound field → index name of the station.

* This is displayed when you have entered a name for preset stations (page 63).

Naming Preset Stations

You can enter a name of up to 8 characters for preset stations. These names (for example, “XYZ”) appear in the receiver’s front panel display when a station is selected.

Note that no more than one name can be entered for each preset station.



1 Press FUNCTION repeatedly until “TUNER” appears on the front panel display.

The last station you received is tuned in.

Each time you press FUNCTION, the mode of the receiver changes in the following sequence:

DVD → VIDEO → TV/SAT →
AUX → MD/DAT → TUNER →
DVD...

2 Tune in the preset station you want to create an index name for.

If you are not familiar with how to tune in preset stations, see “Listening to the Radio” on page 62.

3 Press NAME.

4 Create an index name by using the cursor buttons:

Press ↓/↑ to select a character, then press → to move the cursor to the next position.

If you make a mistake

Press ← or → repeatedly until the character to be changed flashes, then press ↓/↑ to select the right character.

5 Press ENTER.

To assign index names to other stations

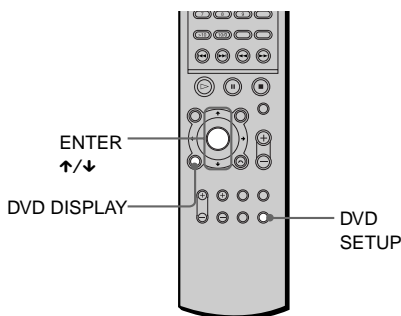
Repeat Steps 2 to 5.

Using the Setup Display



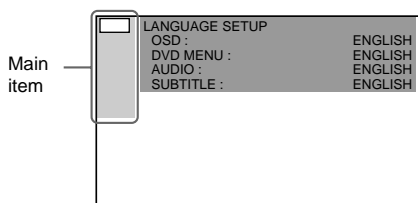
By using the Setup Display, you can make various adjustments to items such as picture and sound. You can also set a language for the subtitles and the Setup Display, among other things. For details on each Setup Display item, see page 65-71. For an overall list of Setup Display items, see page 82.

How to use the Setup Display



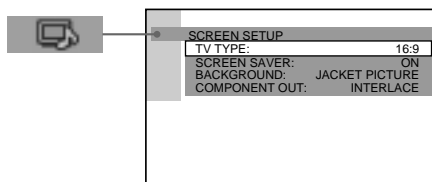
1 In stop mode, press DVD SETUP.

The Setup Display appears.



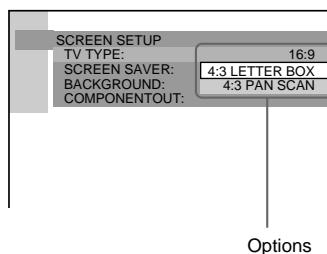
2 Press ↑/↓ to select the setup item from the displayed list: “LANGUAGE SETUP,” “SCREEN SETUP,” “CUSTOM SETUP,” “SPEAKER SETUP,” and “RESET”. Then press ENTER or →.

The selected Setup item appears.
Example: “SCREEN SETUP”



3 Select an item using ↑/↓, then press ENTER or →.

The options for the selected item appear.
Example: “TV TYPE”

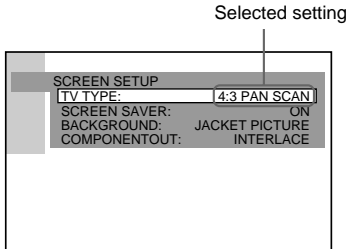


Options

4 Select a setting using \uparrow/\downarrow , then press ENTER.



The setting is selected and setup is complete.

Example: “4:3 PAN SCAN”



To turn off the Setup Display

Press DVD SETUP or DVD DISPLAY repeatedly until the Setup Display is turned off.

 If you select “RESET” in Step 2, you can reset all of the “SETUP” settings on page 82 (except for PARENTAL CONTROL) to the default settings. After you select “RESET” and press ENTER, select “YES” to reset the settings (it takes a few seconds to complete), or select “NO” and press ENTER to return to the Control Menu. Do not press POWER on the receiver or  when resetting the receiver.

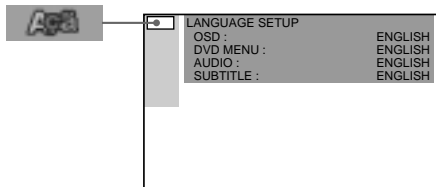
Setting the Display or Sound Track Language

(LANGUAGE SETUP)



“LANGUAGE SETUP” allows you to set various languages for the on-screen display or sound track.

Select “LANGUAGE SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 64).



■ OSD (On-Screen Display)

Switches the display language on the screen.
Selects the language from the displayed list.

■ DVD MENU (DVD only)

Selects the desired language for the DVD menu.

■ AUDIO (DVD only)

Switches the language of the sound track.
Selects the language from the displayed list.

■ SUBTITLE (DVD only)

Switches the language of the subtitle.
Selects the language from the displayed list.

💡 If you select “OTHERS →” in “DVD MENU,” “SUBTITLE,” or “AUDIO,” select and enter the language code from the list using the number buttons (page 81).

After you have made a selection, the language code (4 digits) is displayed the next time you select “OTHERS →.”

Note

If you select a language that is not recorded on the DVD, one of the recorded languages will be automatically selected (except for the “OSD”).

Settings for the Display

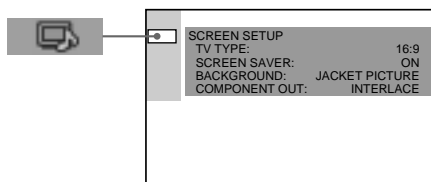
(SCREEN SETUP)



Choose settings according to the TV to be connected.

Select “SCREEN SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 64).

The default settings are underlined.



■ TV TYPE (DVD only)

Selects the aspect ratio of the connected TV (4:3 standard or wide).

The default settings vary, depending on the country model.

16:9	Select this when you connect a wide-screen TV or a TV with a wide mode function.
4:3 LETTER BOX	Select this when you connect a 4:3 screen TV. Displays a wide picture with bands on the upper and lower portions of the screen.
4:3 PAN SCAN	Select this when you connect a 4:3 screen TV. Automatically displays the wide picture on the entire screen and cuts off the portions that do not fit.



4:3 LETTER BOX




4:3 PAN SCAN



Note

Depending on the DVD, “4:3 LETTER BOX” may be selected automatically instead of “4:3 PAN SCAN” or vice versa.

SCREEN SAVER

Turns the screen saver on and off so that the screen saver image appears when you leave the receiver in pause or stop mode for 15 minutes, or when you playback a CD for more than 15 minutes. The screen saver will help prevent your display device from becoming damaged (ghosting). Press  to turn off the screen saver.

ON	Turns on the screen saver.
OFF	Turns off the screen saver.

BACKGROUND

Selects the background color or picture on the TV screen in stop mode or while playing a CD.

JACKET PICTURE	The jacket picture (still picture) appears in the background, but only when the jacket picture is already recorded on the disc (CD-EXTRA, etc.). If the disc does not contain a jacket picture, the “GRAPHICS” picture appears.
GRAPHICS	A preset picture stored in the receiver appears in the background.
BLUE	The background color is blue.
BLACK	The background color is black.

COMPONENT OUT

This will change the type of signal output from the COMPONENT VIDEO OUT jacks on the receiver. See page 77, 78 for more information about the different types.

INTERLACE	Select this when you are connected to a standard (interlace format) TV.
PROGRESSIVE	Select this when you have a TV that can accept progressive signals.

Notes

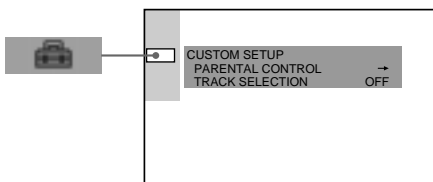
- Unless the COMPONENT VIDEO OUT/SCAN SELECT switch on the back panel of the unit is set to “SELECTABLE,” you cannot select the above setting.
- When “PROGRESSIVE” is selected in “SCREEN SETUP,” no signal is output from the MONITOR jack.

Custom Settings (CUSTOM

SETUP) **DVD** **VIDEO CD** **SA-CD CD** **MP3**

Allows setting up Parental Control and other settings.

Select “CUSTOM SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 64). The default settings are underlined.



■PARENTAL CONTROL → (DVD only)

Sets a password and playback limitation level for DVDs with playback limitation for children. For details, see “Limiting playback for children (Parental Control)” (page 55).

■TRACK SELECTION (DVD only)

Gives the sound track having the highest number of channels priority when you play a DVD on which multiple audio formats (PCM, MPEG audio, DTS, or Dolby Digital format) are recorded.

<u>OFF</u>	No priority given.
<u>AUTO</u>	Priority given.

Notes

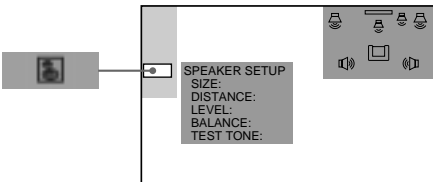
- When you set the item to “AUTO,” the language may change. The “TRACK SELECTION” setting has higher priority than the “AUDIO” settings in “LANGUAGE SETUP” (page 65).
- If PCM, DTS, MPEG audio, and Dolby Digital sound tracks have the same number of channels, the receiver selects PCM, DTS, Dolby Digital, and MPEG audio sound tracks in this order.
- Depending on the DVD, the audio channel with priority may be predetermined. In this case, you cannot give priority to the DTS, Dolby Digital, or MPEG audio format by selecting “AUTO.”

Settings for the Speakers

(SPEAKER SETUP)

To obtain the best possible surround sound, set the size of the speakers you have connected and their distance from your listening position. Then use the test tone to adjust the volume and the balance of the speakers to the same level.

Select “SPEAKER SETUP” in the setup display. For details, see “Using the Setup Display” (page 64).
The default settings are underlined.



To return to the default setting
Select the item, then press CLEAR.

■ SIZE

When you do not connect center or rear speakers, or move the rear speakers, set the parameters for FRONT, CENTER, REAR, and SUBWOOFER. The default settings are underlined.

- FRONT
 - LARGE: Normally select this.
 - SMALL: Select this if the small speakers are used for the front speaker.
- CENTER
 - LARGE: Normally select this.
 - SMALL: Select this if the small speaker is used for the center speaker.
 - NONE: Select this if no center speaker is used.

- REAR
 - BEHIND [A] (LOW), BEHIND [A] (HIGH), SIDE [A] (LOW), SIDE [A] (HIGH), BEHIND [B] (LOW), BEHIND [B] (HIGH), SIDE [B] (LOW), SIDE [B] (HIGH): Specify the size, position, and height to implement the Digital Cinema Surround modes in the sound field (page 55) properly. For details, see “Specifying the rear speaker position and height” as below.
 - NONE: Select this if no rear speaker is used.
- SUBWOOFER
 - YES: Select this if the subwoofer is used.
 - NONE: Select this if no subwoofer is used.

Notes

- When you select an item, the sound cuts off for a moment.
- Depending on the settings, the subwoofer may output excessive sound.

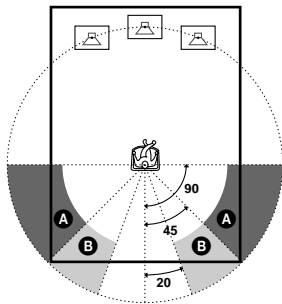
Specifying the rear speaker position and height

If you select anything other than “NONE” in “REAR,” specify the size, position, and height of the rear speakers. When you use normal size speakers, select [A]. When you use small speakers, select [B]. The default setting is underlined.

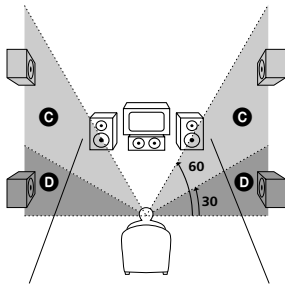
<u>BEHIND [A] (LOW)</u> , BEHIND [B] (LOW)	Select this if the rear speakers are located in section B and D .
BEHIND [A] (HIGH), BEHIND [B] (HIGH)	Select this if the rear speakers are located in section B and C .
SIDE [A] (LOW), SIDE [B] (LOW)	Select this if the rear speakers are located in section A and D .
SIDE [A] (HIGH), SIDE [B] (HIGH)	Select this if the rear speakers are located in section A and C .

These parameters are not available when “REAR” is set to “NONE.”

Position diagram

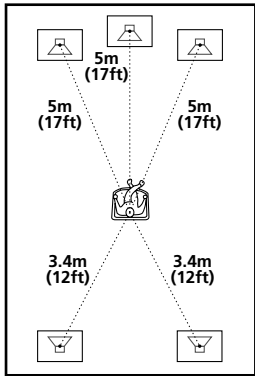


Height diagram



■ **DISTANCE**

The default distance setting for the speakers in relation to the listening position is shown below.



Be sure to change the value in the Setup Display when you move the speakers. The default settings are underlined.

FRONT <u>5 m/17 ft</u>	Front speaker distance from the listening position can be set in 0.2 meter (1.0 ft) increments from 1.0 to 15.0 meters (3.0 to 50.0 ft).
CENTER <u>5 m/17 ft</u>	Center speaker distance can be moved up to 1.6 meters (5.0 ft) forward closer to the listening position from the front speaker position, in 0.2 meter (1.0 ft) increments.
REAR <u>3.4 m/12 ft</u>	Rear speaker distance can be moved up to 4.6 meters (15.0 ft) closer to your listening position from the front speaker position, in 0.2 meter (1.0 ft) increments.

Notes

- When you set the distance, the sound cuts off for a moment.
- If each of the front or rear speakers are not placed at an equal distance from your listening position, set the distance according to the closest speaker.
- Do not place the rear speakers farther away from your listening position than the front speakers.

■ **LEVEL**

You can vary the level of each speaker as follows. Be sure to set “TEST TONE” to “ON” for easy adjustment.
The default settings are underlined.

CENTER <u>0 dB</u>	Adjusts the level of the center speaker (–10 dB to +10 dB, 1 dB increments).
REAR <u>0 dB</u>	Adjusts the level of the rear speakers (–10 dB to +10 dB, 1 dB increments).
SUBWOOFER <u>0 dB</u>	Adjusts the level of the subwoofer (–10 dB to +10 dB, 1 dB increments).

■BALANCE

You can vary the balance of the left and right speakers as follows. Be sure to set “TEST TONE” to “ON” for easy adjustment. The default settings are underlined.

FRONT <u>CENTER</u>	Adjust the balance between the front left and right speakers (You can adjust from center 6 steps left or right).
REAR <u>CENTER</u>	Adjust the balance between the rear left and right speakers (You can adjust from center 6 steps left or right).

To adjust the volume of all the speakers at one time

Use the VOLUME control on the receiver or press VOLUME +/-.

■TEST TONE

The speakers will emit a test tone to adjust “BALANCE” and “LEVEL.”

<u>OFF</u>	The test tone is not emitted from the speakers.
ON	The test tone is emitted from each speaker in sequence while adjusting balance or level. When you select one of the “SPEAKER SETUP” items, the test tone is emitted from both left and right speakers simultaneously.

Adjusting the speaker volume and level

- 1

After you stop playback, select “SPEAKER SETUP” after pressing DVD SETUP in the Setup Display.
- 2

Select “TEST TONE” and set “TEST TONE” to “ON.”
You will hear the test tone from each speaker in sequence.
- 3

From your listening position, select “BALANCE” or “LEVEL” and adjust the value of “BALANCE” and “LEVEL” using \uparrow/\downarrow .
The test tone is emitted from both left and right speakers simultaneously.
- 4

Select “TEST TONE” and set “TEST TONE” to “OFF” to turn off the test tone.

Note

When you adjust the speaker settings, the sound cuts off for a moment.

Troubleshooting

If you experience any of the following difficulties while using the receiver, use this troubleshooting guide to help remedy the problem before requesting repairs. Should any problem persist, consult your nearest Sony dealer.

Power

The power is not turned on.

- ➔ Check that the AC power cord (mains lead) is connected securely.

Picture

There is no picture.

- ➔ The connecting cords are not connected securely.
- ➔ The connecting cords are damaged.
- ➔ The receiver is not connected to the correct TV input jack (page 22).
- ➔ The video input on the TV is not set so that you can view pictures from the receiver.
- ➔ You have set “COMPONENT OUT” in “SCREEN SETUP” to “PROGRESSIVE” even though your TV cannot accept the signal in progressive format. In this case, set the COMPONENT VIDEO OUT/SCAN SELECT switch on the back panel of the player to INTERLACE. Then set “COMPONENT OUT” to “INTERLACE” after you can see the TV screen correctly, and reset the COMPONENT VIDEO OUT/SCAN SELECT switch to SELECTABLE.
- ➔ Even if your TV is compatible with progressive format (480p) signals, the image may be affected when you set “COMPONENT OUT” to “PROGRESSIVE.” In this case, set “COMPONENT OUT” to “INTERLACE.”
- ➔ When “PROGRESSIVE” is selected in “SCREEN SETUP,” no signal is output from the MONITOR jack.

Picture noise appears.

- ➔ The disc is dirty or flawed.
- ➔ If the picture output from your receiver goes through your VCR to get to your TV, the copy-protection signal applied to some DVD programs could affect picture quality. If you still experience problems even when you connect your receiver directly to your TV, try connecting your receiver to your TV’s S video input (page 22).

Even though you set the aspect ratio in “TV TYPE” of “SCREEN SETUP,” the picture does not fill the screen.

- ➔ The aspect ratio of the disc is fixed on your DVD.

The picture is black and white.

- ➔ Depending on the TV, the picture on the screen becomes black and white when you play a disc recorded in the NTSC color system.

Sound

There is no sound.

- ➔ The connecting cord is not connected securely.
- ➔ The connecting cord is damaged. Replace it with a new one.
- ➔ Press MUTING on the remote if “MUTING ON” is displayed on the front panel display.
- ➔ The protective device on the receiver has been activated because of a short circuit. Turn off the receiver, eliminate the short-circuit problem and turn on the power again.
- ➔ The receiver is in pause mode or in Slow-motion Play mode. Press ▷ to return to normal play mode.
- ➔ Fast forward or fast reverse is performed. Press ▷ to return to normal play mode.
- ➔ Check the speaker settings (pages 24, 69).

The left and right sounds are unbalanced or reversed.

- ➔ Check that the speakers and components are connected correctly and securely.
- ➔ Adjust the balance parameter in the BALANCE menu (pages 27, 71).

Severe hum or noise is heard.

- ➔ Check that the speakers and components are connected securely.
- ➔ Check that the connecting cords are away from a transformer or motor, and at least 3 meters (10 feet) away from a TV set or fluorescent light.
- ➔ Move your TV away from the audio components.
- ➔ The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol.
- ➔ Clean the disc.

The sound loses stereo effect when you play a VIDEO CD, or a CD.

- ➔ Set “AUDIO” to “STEREO” in the Control Menu display (page 46).
- ➔ Make sure you connect the receiver appropriately.

The surround effect is difficult to hear when you are playing a Dolby Digital, DTS, or MPEG audio sound track.

- ➔ Make sure the sound field function is on (page 48).
- ➔ Check the speaker connections and settings (pages 24, 69).
- ➔ Depending on the DVD, the output signal may not be the entire 5.1 channel. It may be monaural or stereo even if the sound track is recorded in Dolby Digital or MPEG audio format.

The sound comes from the center speaker only.

- ➔ Depending on the disc, the sound may come from the center speaker only.

No sound is heard from the center speaker.

- ➔ Check the speaker connections and settings.
- ➔ Make sure the sound field function is on (page 48).
- ➔ Select a sound field containing the word “cinema” (page 48).

No sound or only a very low-level sound is heard from the rear speakers.

- ➔ Check the speaker connections and settings.
- ➔ Make sure the sound field function is on (page 48).
- ➔ Select a sound field containing the word “cinema” (page 48).

Operation

Radio stations cannot be tuned in.

- ➔ Check that the antennas are connected securely. Adjust the antennas and connect an external antenna if necessary.
- ➔ The signal strength of the stations is too weak (when tuning in with automatic tuning). Use direct tuning.
- ➔ No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations). Preset the stations (page 29).
- ➔ Press DISPLAY so that the frequency appears in the display.

The remote does not function.

- ➔ The controllable source on the remote is the satellite receiver. Press SAT on the remote (page 61).
- ➔ There are obstacles between the remote and the receiver.
- ➔ The distance between the remote and the receiver is too far.
- ➔ The remote is not pointed at the remote sensor on the receiver.
- ➔ The batteries in the remote are weak.

The disc does not play.

- ➔ There is no disc inside.
- ➔ The disc is turned over.
Insert the disc with the playback side facing down on the disc tray.
- ➔ The disc is skewed.
- ➔ The receiver cannot play CD-ROMs, etc. (page 8).
- ➔ The region code on the DVD does not match the receiver.
- ➔ Moisture has condensed inside the receiver.
Remove the disc and leave the receiver turned on for about half an hour (page 4).

The MP3 audio track cannot be played.

- ➔ The DATA CD is not recorded in the MP3 format that conforms to ISO9660 Level 1/Level 2 or Joliet.
- ➔ The MP3 audio track does not have the extension “.MP3.”
- ➔ The data is not formatted in MP3 even though it has the extension “.MP3.”
- ➔ The player cannot play audio tracks in MP3PRO format.

The title of the MP3 audio album or track is not correctly displayed.

- ➔ The player can only display numbers and alphabet. Other characters are displayed as “ ”.

The disc does not start playing from the beginning.

- ➔ Program Play, Shuffle Play, or Repeat Play has been selected (pages 36, 38, 39).
Press CLEAR to cancel these functions before playing a disc.
- ➔ Resume Play has been selected.
During stop, press ■ on the receiver or the remote and then start playback (page 32).
- ➔ The title, DVD or PBC menu automatically appears on the TV screen.

The receiver starts playing the disc automatically.

- ➔ The DVD features an auto playback function.

Playback stops automatically.

- ➔ Some discs may contain an auto pause signal.
While playing such a disc, the receiver stops playback at the auto pause signal.

You cannot perform some functions such as Stop, Search, Slow-motion Play, Repeat Play, Shuffle Play, or Program Play.

- ➔ Depending on the disc, you may not be able to do some of the operations above. See the operating manual that comes with the disc.

Messages do not appear on the screen in the language you want.

- ➔ In the Setup Display, select the desired language for the on-screen display in “OSD” under “LANGUAGE SETUP” (page 65).

The language for the sound track cannot be changed.

- ➔ Multilingual tracks are not recorded on the DVD being played.
- ➔ The DVD prohibits changing the language for the sound track.

The subtitle language cannot be changed.

- ➔ Multilingual subtitles are not recorded on the DVD being played.
- ➔ The DVD prohibits changing the subtitles.

The subtitle cannot be turned off.

- ➔ The DVD prohibits turning off subtitles.

The angles cannot be changed.

- ➔ Multi-angles are not recorded on the DVD being played. The angle can be changed only when the “ANGLE” indicator lights up on the front panel display.
 - ➔ The DVD prohibits changing the angles.
-

The receiver does not operate properly.

- ➔ If static electricity, etc., causes the receiver to operate abnormally, press POWER on the receiver to turn the receiver off and then on again.
-

Nothing is displayed on the front panel display.

- ➔ Press DIMMER on the remote.
-

A 5-character service number is displayed on the screen and on the front panel display.

- ➔ The self-diagnosis function was activated.
(See the table on page 76.)
-

The disc tray does not open and “LOCKED” appears on the front panel display.

- ➔ Contact your Sony dealer or local authorized Sony service facility.
-

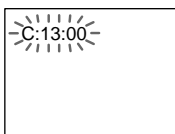
“PROTECT” appears on the front panel display.

- ➔ The speaker protection circuit is in function.
Check the speaker connections.
-

Self-diagnosis Function

(When letters/numbers appear in the display)

When the self-diagnosis function is activated to prevent the receiver from malfunctioning. In this case a five-character service number (e.g., C 13 00) with a combination of a letter and digits appears on the screen and the front panel display. Refer to the following table.



First three characters of the service number	Cause and/or Corrective Action
C 13	The disc is dirty. ➔ Clean the disc with a soft cloth (page 9).
C 31	The disc is not inserted correctly. ➔ Re-insert the disc correctly.
E XX (xx is a number)	To prevent a malfunction, the receiver has performed the self-diagnosis function. ➔ Contact your nearest Sony dealer or local authorized Sony service facility and give the 5-character service number. Example: E 61 10

Glossary

Album

Section of a music piece on a data CD containing MP3 audio tracks.

Chapter

Sections of a picture or a music piece on a DVD that are smaller than titles. A title is composed of several chapters.

Digital Cinema Sound (DCS)

This is the generic name of the surround sound produced by digital signal processing technology developed by Sony. Unlike previous surround sound fields mainly directed at the reproduction of music, Digital Cinema Sound is designed specifically for the enjoyment of movies.

Dolby Digital

This sound format for movie theaters is more advanced than Dolby Pro Logic Surround. In this format, the rear speakers output stereo sound with an expanded frequency range and a subwoofer channel for deep bass is independently provided. This format is also called “5.1” because the subwoofer channel is counted as 0.1 channel (since it functions only when a deep bass effect is needed). All six channels in this format are recorded separately to realize superior channel separation. Furthermore, since all the signals are processed digitally, less signal degradation occurs.

Dolby Pro Logic Surround

As one method of decoding Dolby Surround, Dolby Pro Logic Surround produces four channels from two-channel sound. Compared with the former Dolby Surround system, Dolby Pro Logic Surround reproduces left-to-right panning more naturally and localizes sounds more precisely. To take full advantage of Dolby

Pro Logic Surround, you should have one pair of rear speakers and a center speaker. The rear speakers output monaural sound.

Dolby Pro Logic II

Dolby Pro Logic II creates five full-bandwidth output channels from two-channel sources. This is done using an advanced, high-purity matrix surround decoder that extracts the spatial properties of the original recording without adding any new sounds or tonal colorations.

Movie mode

The Movie mode is for use with stereo television shows and all programs encoded in Dolby Surround. The result is enhanced soundfield directionality that approaches the quality of discrete 5.1-channel sound.

Music mode

The Music mode is for use with any stereo music recordings, and provides a wide and deep sound space.

DTS

Digital audio compression technology that the Digital Theater Systems, Inc. developed. This technology conforms to 5.1-channel surround. The rear channel is stereo and there is discrete subwoofer channel in this format. DTS provides the same 5.1 discrete channels of high quality digital audio. The good channel separation is realized because the all channel data is recorded discrete and processed in digital.

DVD

A disc that contains up to 8 hours of moving pictures even though its diameter is the same as a CD.

The data capacity of a single-layer and single-sided DVD, at 4.7 GB (Giga Byte), is 7 times that of a CD. Furthermore, the data capacity of a dual-layer and single-sided DVD is 8.5 GB, a single-layer and double-sided DVD 9.4 GB, and a dual-layer and double-sided DVD 17 GB.

The picture data uses the MPEG 2 format, one of the worldwide standards of digital

compression technology. The picture data is compressed to about 1/40 of its original size. The DVD also uses the variable rate coding technology that changes the data to be allocated according to the status of the picture.

The audio data is recorded in Dolby Digital as well as in PCM, allowing you to enjoy more real audio presence.

Furthermore, various advanced functions such as the multi-angle, multilingual, and Parental Control functions are provided with the DVD.

Film based software, Video based software

DVDs can be classified as Film based or Video based software. Film based DVDs contain the same images (24 frames per second) that are shown at movie theaters.

Video based DVDs, such as television dramas or sit-coms, displays images at 30 frames (or 60 fields) per second.

Interlace format

Interlace format shows every other line of an image as a single “field” and is the standard method for displaying images on television. The even number field shows the even numbered lines of an image, and the odd numbered field shows the odd numbered lines of an image.

Multi-angle function

Various angles, or viewpoints of the video camera, for a scene are recorded on some DVDs.

Multilingual function

Several languages for the sound or subtitles in a picture are recorded on some DVDs.

Parental Control

A function of the DVD to limit playback of the disc by the age of the users according to the limitation level in each country.

The limitation varies from disc to disc; when it is activated, playback is completely prohibited, violent scenes are skipped or replaced with other scenes and so on.

Playback Control (PBC)


Signals encoded on VIDEO CDs (Version 2.0) to control playback.

By using menu screens recorded on VIDEO CDs with PBC functions, you can enjoy playing simple interactive programs, programs with search functions, and so on.

Progressive format

Compared to the Interlace format that alternately shows every other line of an image (field) to create one frame, the Progressive format shows the entire image at once as a single frame. This means that while the Interlace format can show 30 frames (60 fields) in one second, the Progressive format can show 60 frames in one second. The overall picture quality increases and still images, text, and horizontal lines appear sharper. This player is compatible with the 480 progressive format.

Region Code

This receiver is used to protect copyrights. A region number is allocated on each DVD system or DVD disc according to the sales region. Each region code is shown on the receiver as well as on the disc packaging. The receiver can play the discs that match its region code. The receiver can also play discs with the “” mark. Even when the region code is not shown on the DVD, the region limit may still be activated.

Scene

On a VIDEO CD with PBC (playback control) functions, the menu screens, moving pictures and still pictures are divided into sections called “scenes.”

Title

The longest sections of a picture or music feature on a DVD, movie, etc., in video software, or the entire album in audio software.

Track

Sections of a picture or a music piece on a Super Audio CD, CD, VIDEO CD or MP3. An album is composed of several tracks (MP3 only).

VIDEO CD

A compact disc that contains moving pictures.

The picture data uses the MPEG 1 format, one of the worldwide standards of digital compression technology. The picture data is compressed to about 1/140 of its original size. Consequently, a 12 cm VIDEO CD can contain up to 74 minutes of moving pictures. VIDEO CDs also contain compact audio data. Sounds outside the range of human hearing are compressed while the sounds we can hear are not compressed. VIDEO CDs can hold 6 times the audio information of conventional audio CDs.

There are 2 versions of VIDEO CDs.

- Version 1.1: You can play only moving pictures and sounds.
- Version 2.0: You can play high-resolution still pictures and enjoy PBC functions.

This receiver conforms to both versions.

Super Audio CD

This audio format is based upon the current audio CD standards but includes a greater amount of information which provides higher quality sound. There are three types of discs: single layer, double layer and hybrid discs. The hybrid disc contains both standard audio CD and Super Audio CD information.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6 ohm loads, both channels driven, from 20 – 20,000 Hz; rated 100 watts per channel minimum RMS power, with no more than 0.7 % total harmonic distortion from 250 milliwatts torated output.

Amplifier section

Stereo mode	100 W + 100 W (6 ohms, 20 – 20,000 Hz, THD 0.7 %)
Surround mode	Front: 100 W + 100 W
	Center*: 100 W
	Rear*: 100 W + 100 W (6 ohms, 20 – 20,000 Hz, THD 0.7 %)

* Depending on the sound field settings and the source, there may be no sound output.

Inputs (Analog)	ANALOG IN: Sensitivity: 150 mV Impedance: 50 kilohms
Inputs (Digital)	DIGITAL IN OPTICAL: Sensitivity: – DIGITAL IN COAXIAL: Sensitivity: 0.5 V Impedance: 75 ohms
Outputs (Analog)	ANALOG OUT: Voltage: 2 V Impedance: 1 kilohms SUBWOOFER ANALOG OUT: Voltage: 3 V Impedance: 47 kilohms PHONES: Accepts low- and high-impedance headphones
Outputs (Digital)	DIGITAL OUT OPTICAL Sensitivity: –

Super Audio CD/DVD system

Laser	Semiconductor laser (Super Audio CD/DVD: $\lambda = 650$ nm) (CD: $\lambda = 780$ nm) Emission duration: continuous
Signal format system	NTSC
Frequency response (at 2 CH STEREO mode)	DVD (PCM): 2 Hz to 22 kHz (± 1.0 dB) CD: 2 Hz to 20 kHz (± 1.0 dB)
Signal-to-noise ratio	More than 80 dB (VIDEO 1 (AUDIO) connectors only)
Harmonic distortion	Less than 0.03 %

FM tuner section

System	PLL quartz-locked digital synthesizer system
Tuning range	87.5 – 108.0 MHz (100 kHz step)
Antenna	FM wire antenna
Antenna terminals	75 ohms, unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

System	PLL quartz-locked digital synthesizer system
Tuning range	530 – 1,710 kHz (with the interval set at 10 kHz) 531 – 1,710 kHz (with the interval set at 9 kHz)
Antenna	Loop antenna
Intermediate frequency	450 kHz

Video section

Inputs	S-video: Y: 1 Vp-p 75 ohms C: 0.286 Vp-p 75 ohms
Outputs	S-video: Y: 1 Vp-p 75 ohms C: 0.286 Vp-p 75 ohms

General

Power requirements	120 V AC, 60 Hz
Power consumption	180 W 1.5 W (at the Power Saving Mode)
Dimensions (approx.)	430 × 98 × 453 mm (17 × 3 ⁷ / ₈ × 17 ⁷ / ₈ inches) (w/h/d) incl. projecting parts
Mass (approx.)	7.5 kg (16 lb 9 oz)
Operating temperature	5°C to 35°C (41°F to 95°F)
Operating humidity	5 % to 90 %
Supplied accessories	See page 16.

Design and specifications are subject to change without notice.

Language Code List

For details, see pages 48, 55, 68.

The language spellings conform to the ISO 639: 1988 (E/F) standard.

Code Language	Code Language	Code Language	Code Language
1027 Afar	1183 Irish	1347 Maori	1507 Samoan
1028 Abkhazian	1186 Scots Gaelic	1349 Macedonian	1508 Shona
1032 Afrikaans	1194 Galician	1350 Malayalam	1509 Somali
1039 Amharic	1196 Guarani	1352 Mongolian	1511 Albanian
1044 Arabic	1203 Gujarati	1353 Moldavian	1512 Serbian
1045 Assamese	1209 Hausa	1356 Marathi	1513 Siswati
1051 Aymara	1217 Hindi	1357 Malay	1514 Sesotho
1052 Azerbaijani	1226 Croatian	1358 Maltese	1515 Sundanese
1053 Bashkir	1229 Hungarian	1363 Burmese	1516 Swedish
1057 Byelorussian	1233 Armenian	1365 Nauru	1517 Swahili
1059 Bulgarian	1235 Interlingua	1369 Nepali	1521 Tamil
1060 Bihari	1239 Interlingue	1376 Dutch	1525 Telugu
1061 Bislama	1245 Inupiak	1379 Norwegian	1527 Tajik
1066 Bengali; Bangla	1248 Indonesian	1393 Occitan	1528 Thai
1067 Tibetan	1253 Icelandic	1403 (Afan)Oromo	1529 Tigrinya
1070 Breton	1254 Italian	1408 Oriya	1531 Turkmen
1079 Catalan	1257 Hebrew	1417 Punjabi	1532 Tagalog
1093 Corsican	1261 Japanese	1428 Polish	1534 Setswana
1097 Czech	1269 Yiddish	1435 Pashto; Pushto	1535 Tonga
1103 Welsh	1283 Javanese	1436 Portuguese	1538 Turkish
1105 Danish	1287 Georgian	1463 Quechua	1539 Tsonga
1109 German	1297 Kazakh	1481 Rhaeto- Romance	1540 Tatar
1130 Bhutani	1298 Greenlandic	1482 Kirundi	1543 Twi
1142 Greek	1299 Cambodian	1483 Romanian	1557 Ukrainian
1144 English	1300 Kannada	1489 Russian	1564 Urdu
1145 Esperanto	1301 Korean	1491 Kinyarwanda	1572 Uzbek
1149 Spanish	1305 Kashmiri	1495 Sanskrit	1581 Vietnamese
1150 Estonian	1307 Kurdish	1498 Sindhi	1587 Volapük
1151 Basque	1311 Kirghiz	1501 Sangho	1613 Wolof
1157 Persian	1313 Latin	1502 Serbo-Croatian	1632 Xhosa
1165 Finnish	1326 Lingala	1503 Singhalese	1665 Yoruba
1166 Fiji	1327 Laothian	1505 Slovak	1684 Chinese
1171 Faroese	1332 Lithuanian	1506 Slovenian	1697 Zulu
1174 French	1334 Latvian; Lettish		
1181 Frisian	1345 Malagasy		
			1703 Not specified

DVD Setup Menu List

You can set the following items with the DVD setup menu.

The order of the displayed items may be different from the actual display.

LANGUAGE SETUP

- OSD — (Select the language you want to use from the displayed language list.)
- DVD MENU — (Select the language you want to use from the displayed language list.)
- AUDIO — (Select the language you want to use from the displayed language list.)
- SUBTITLE — (Select the language you want to use from the displayed language list.)

SCREEN SETUP

- TV TYPE —
 - 16:9
 - 4:3 LETTER BOX
 - 4:3 PAN SCAN
- SCREEN SAVER —
 - ON
 - OFF
- BACKGROUND —
 - JACKET PICTURE
 - GRAPHICS
 - BLUE
 - BLACK
- COMPONENT OUT —
 - INTERLACE
 - PROGRESSIVE

CUSTOM SETUP

- PARENTAL CONTROL —
 - LEVEL —
 - OFF
 - 8.
 - 7. NC17
 - 6. R
 - 5.
 - 4. PG13
 - 3. PG
 - 2.
 - 1. G
 - STANDARD —
 - USA
 - OTHERS →
 - CHANGE PASSWORD —
- TRACK SELECTION —
 - OFF
 - AUTO

SPEAKER SETUP

- SIZE —
 - FRONT —
 - LARGE
 - SMALL
 - CENTER —
 - LARGE
 - SMALL
 - NONE
 - REAR —
 - BEHIND —
 - [A] (LOW)
 - [A] (HIGH)
 - [B] (LOW)
 - [B] (HIGH)
 - SIDE —
 - [A] (LOW)
 - [A] (HIGH)
 - [B] (LOW)
 - [B] (HIGH)
 - NONE
- SUBWOOFER —
 - YES/NONE
- DISTANCE —
 - FRONT —
 - 1.0m ~ 15m/
 - 3ft ~ 50ft
 - CENTER —
 - 0m ~ 15m/
 - 0ft ~ 50ft
 - REAR —
 - 0m ~ 15m/
 - 0ft ~ 50ft
- LEVEL —
 - CENTER —
 - 10 dB ~ +10 dB
 - REAR —
 - 10 dB ~ +10 dB
 - SUBWOOFER —
 - 10 dB ~ +10 dB
- BALANCE —
 - FRONT —
 - 6 steps left or right
 - REAR —
 - 6 steps left or right
- TEST —
 - OFF
 - ON

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